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ABSTRACT

This paper reports on a successful attempt to understand success avoidant motivation and behavior by the development of an empirically sophisticated scoring system of success avoidant motivation and the observation of its behavioral correlates and situational determinants. Like most of the work on achievement motivation, the study was carried out within the conceptual framework of an Expectancy-Value theory of motivation. Within this context, motivation or goal-directed tendencies are considered the result of an interaction between stable motives that characterize the individual personality and other more immediate situational factors, with particular emphasis given to the person's expectations about the consequences of his actions in a particular situation. The scoring system does not depend on reaction to any one specific cue and avoids most of the major problems encountered in earlier research. It can be used with any number of cues and can be applied to a variety of neutral cues. In addition to the original population sample, a sample of females was used to cross-validate the scoring system by writing TAT stories under neutral conditions and later performing in a competitive mixed sex situation similar to the original study. This cross-validation adds credibility that the system can be applied to a variety of cues. Suggestions for further analysis and study are presented. (Author/PC)

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FINAL REPORT

SUCCESS AVOIDANT MOTIVATION AND BEHAVIOR:
ITS DEVELOPMENTAL CORRELATES AND SITUATIONAL DETERMINANTS

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FOREWORD

The research reported herein was supported by Office of Education Grant #OEG-1-71-0104(508) from the U.S. Department of Health, Education and Welfare. This represents the final report on this grant from June 1971 - September 1973.

I wish to acknowledge the assistance of Robert Watson, Jr., David Tresemer, Anne Berens, Mary Beth Shinn, Jackie Fleming Hamilton, Lawrence Aber, Richard Gula and Abigail Stewart in various phases of the data collection and analysis of the data. This study was made possible by the interest and cooperation of several members of the Department of Psychology at the University of New Hampshire who made the students of their department available as subjects and provided space for all parts of the testing. I am very grateful to each of them.

I am also grateful to Mrs. Lois Rochester who made the arrangements for Mary Beth Shinn to do her undergraduate honors thesis study of "Secondary School Coeducation and the Fears of Success and Failure," using a preliminary version of the final scoring system presented here and observing the behavioral correlates and situational determinants of success avoidant motivation measured in this way.

Chapter I

INTRODUCTION

The work reported herein has been an attempt to enhance our understanding of success avoidant motivation and behavior in several ways, first by developing empirically a more sophisticated scoring system of success avoidant motivation and then observing its behavioral correlates and situational determinants.

Like most of the work on achievement motivation it has been carried out within the conceptual framework of an Expectancy-Value theory of motivation. Within this context, motivation or goal-directed tendencies are considered the result of an interaction between stable motives that characterize the individual personality and other more immediate situational factors, with particular emphasis given to the person's expectations about the consequences of his actions in a particular situation. Only recently have we begun to appreciate the complexity of the interactions between the various determinants of achievement motivation.

Background for Development of the Concept of Success Avoidant Motivation

The past 25-30 years have seen an impressive research effort directed toward enhancing our understanding of the determinants of achievement motivation. This effort has involved a continual interaction between theoretical speculation and empirical research. The results (which are summarized in Atkinson and Feather's book A Theory of Achievement Motivation, 1966) indicate that the strength of motivation to undertake and do well at achievement-oriented activities is a much more complexly determined function than

previously believed. Achievement-directed activity is no longer considered simply the direct expression of the motive to achieve success, this stable characteristic of the personality, conceived as a capacity for experiencing positive affect when performing well against a standard of excellence (McClelland et al., 1953; Atkinson, 1958). We now know that several more transient, nonetheless extremely important situational factors mediate between the strength of the stable motive to achieve, as assessed by the TAT, and the final strength of achievement motivation or the tendency to achieve. The most important of these situational determinants is the individual's expectancy or subjective probability of success on the activity in question which is in turn a function of both the objective difficulty of the task and of the individual's perceived competence on that kind of task. Also important is the incentive value of success which was considered until now to be simply an inverse function of task difficulty.

To our increasingly comprehensive list of determinants of the strength of achievement motivation has recently been added the strength of inertial tendencies to achieve which may be present in an achievement situation because at some time in the recent past achievement motivation was aroused but not sufficiently gratified (Atkinson, 1969). The idea is not unlike Freud's notion of the persistence of an unfulfilled wish. Raynor's work (1968) on the functional significance of future achievement goals has added yet another variable to the list. It concerns the incentive value, salience, relevance or importance of success at a particular achievement activity. His data suggest that an individual's characteristic achievement motivation for a particular (achievement-oriented) activity will be increased if present performance is seen by the individual as instrumental to attaining a future

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achievement goal. He has data showing that the relationship between achievement motivation and performance (in a course) is greatly accentuated if success in the course is seen as having long range consequences with respect to one's future career success.

When I undertook the initial study which identified the motive to avoid success as a psychological barrier to achievement in women, (Horner, 1968) there was an impressive, substantial body of theoretically consistent data establishing a relationship between level of performance in achievement-oriented activity and strength of resultant achievement motivation (Atkinson and Feather, 1966). There were nonetheless, still a number of rather perplexing and as yet unresolved problems facing those concerned with the nature of this relationship and with other potential determinants of the levels of aspiration, performance, and persistence shown by individuals in achievement-directed activities.

The first problem centered on the influence or role played by various extrinsic sources of motivation for doing well. Several studies (Reitman, 1960; Atkinson and Reitman, 1956; Smith, 1961; and Atkinson and O'Connor, (1958) 1966) all repeated in Atkinson and Feather, 1966 or Atkinson/pointed to the fact that the relationship between achievement motivation and achievement-oriented performance is confounded when other motives or incentives for doing well such as money, affiliation, or approval are also present in the situation.

The second problem concerned the troublesome sex differences that had been detected in a number of earlier studies (McClelland et al., 1953; Lesser, Krawitz, and Packard, 1963; and French and Lesser, 1964) and which Atkinson

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(1958) had labelled as "perhaps the most persistent unresolved problem in research on n Achievement". In light of the fact that the findings for women continued to be consistent neither with the theory, the findings for men, nor even internally consistent with each other, those working in the area were eventually forced to ignore the problem and to focus their attentions on understanding the issues surrounding achievement motivation in men. It seemed however that in order to be truly comprehensive, the theory of achievement motivation would have to be expanded so as to embrace, and perhaps even predict the observed sex differences. Toward this end, I suggested the addition of still another variable or motive to an already complex list of determinants of achievement motivation. I identified the motive to avoid success as a potential psychological barrier to achievement, especially in white women striving for success in competitive situations. (Note, though, that the concept was in no way restricted to women by biological necessity.) The motive was conceptualized in Expectancy-Value theory terms closely paralleling those for the achievement motive and the motive to avoid failure. Within this context, it was assumed that "fear of success" is aroused by the anticipation that success will be followed by negative consequences and that once aroused, it will exert an adverse or inhibitory effect on the strength of achievement motivation and performance comparable to that exerted by motivation to avoid failure. It was assumed to have this effect on anyone for whom the anticipation of success was associated with the expectation of negative consequences for any reason whatsoever. It was hoped that adding the motive to avoid success to the existing list of determinants of achievement motivation might be helpful in

resolving some of these troublesome issues described above. The primary hypotheses behind the idea for its presence in women were as follows:

Intense intellectual striving has been considered as competitive and aggressive behavior. "Each step forward as a successful American regardless of sex means a step back as a woman" (Mead, 1949). At the same time, the essence of femininity particularly in our culture has been attributed to repressing aggressiveness (Freud, 1933). As a result, unusual excellence in competitive achievement activity has, for women, become either consciously or unconsciously equated with a loss of femininity and has been identified as a basis for social rejection. For most women, therefore, the anticipation of success in competitive achievement activity, especially against male competitors, is associated with the anticipation of negative consequences because of the success. For most men on the other hand, this is not a problem; active striving for success is not accompanied by the anticipation that their masculinity will be questioned or threatened if success should be attained. In fact, the reverse is probably true: Mead said men were unsexed by failure. It may be that for women, there is an expectancy that they will be unsexed by success. This expectancy may then have an adverse effect on their performance in achievement-directed activities.

The two problems at first appeared to be unrelated. The connection between them is, however, established when they are viewed in terms of an Expectancy-Value theory of motivation in which as previously discussed, the

behavior of an individual is said to be determined by the expectations (anticipations) he/she holds about the nature and probability of the outcomes or consequences of his/her actions and also by the incentive value (strength of attractiveness or repulsion) of these consequences to him/her. Both problems within this framework point to the need for a much more elaborate specification of the psychological significance or meaning that the consequences of an activity have to a particular individual with certain personality traits under certain kinds of conditions. In other words, it is important to understand the nature of the expectancies one has about the consequences of his behavior in light of his personality and the nature of the situation. As a first step toward this end, I focused my attention on the psychological significances of success in various kinds of competitive achievement situations (two interpersonal competitive and one strictly non-competitive) for both men and women as a function of individual differences in motivational dispositions. A Thematic Apperceptive method for assessing individual differences in the motive to avoid success was adopted using a simple presence or absence scoring system, aimed at tapping conscious reactions to high levels of accomplishment for women in areas traditionally restricted to men. The Scoring Criteria for Motive to Avoid Success at this time in response to success specific cues were as follows:

List of Scoring Criteria

- a. negative consequences because of the success
- b. anticipation of negative consequences because of the success
- c. negative affect because of the success
- d. instrumental activity away from present or future success, including leaving the field for more traditional female work such as nursing, school teaching, or social work.

e. any direct expression of conflict about success

Also scored was evidence of

f. denial of the situation described by the cue

g. bizarre, inappropriate, unrealistic or non-adaptive responses to the situation described by the cue

These differences were then related to performance in non-competitive and mixed sex competitive conditions. The key results of this study are summarized in Table A and Table B.

Table A

Number of Subjects Classified According to Sex who Show Evidence of Fear of Success Imagery

Fear of Success Imagery	Sex		χ^2	p
	Males	Females		
Low	80	34	52.26	.005
High	8	56		

Table B

Relative Performance of Women in Competitive and Non-Competitive Situations as a Function of Individual Differences in Fear of Success Imagery

Fear of Success Imagery	Do Better Working Alone	Do Better Working in Competitive Situations
High	13	4
Low	1	12

$$\chi^2 = 11.374, p < .005$$

Briefly, the first striking characteristic of the results was the sheer magnitude and nature of the differences in responses made to the cue ("At the

end of first term finals Ann/John finds herself/himself at the top of her/his medical school class") by the 88 male and 90 female subjects. In accordance with the hypothesis, fear of success imagery dominated the female responses (greater than 65%) and were relatively absent in the male responses (less than 10%). Men responded with strong positive feelings, indicated increased striving, confidence in the future, and a belief that this success would be instrumental to fulfilling other goals such as providing a secure and happy home for some girl. The majority of female subjects were disconcerted, troubled or confused by the cue. Unusual excellence in women was clearly associated for them with the loss of femininity, social rejection, personal or societal destruction or some combination of the above. Their responses were filled with negative consequences and affect, righteous indignation, withdrawal rather than enhanced striving; guilt, concern and for some even an inability to accept the information presented in the cue. In other words women showed significantly more evidence of the motive to avoid success than did the men ($p < .0005$) at this time prior to widespread social consciousness about women and equal rights and general devaluation of traditional success and achievement goals.

In an attempt to see if in fact it is the aggressive overtones of competition, especially against men, that evokes anxiety about success, the level of performance of the subjects on a number of achievement tasks in a large mixed sex competitive situation was then compared with their own subsequent performance (thus controlling for ability effects) in a strictly non-competitive but achievement-oriented situation. In the latter the only competition involved was with the task and one's internal standards of

excellence. The girls high in the motive to avoid success performed at a significantly lower level in the mixed sex competitive condition than in the non-competitive condition. The girls low in fear of success on the other hand did better under the competitive condition as did most of the men (2/3) in the study (Horner, 1968). It is interesting to note that anxiety about success was the only one of the four psychological variables, for which individual differences were assessed in the study, that predicted female performance. The results of the study suggested rather strongly that young women, especially those high in the motive to avoid success, would be least likely to develop their interests and explore their intellectual potential when competing against others, especially against men.

Several things happened in society since the original work that have influenced work in this area had necessitated the development of a new and more sophisticated scoring system for assessing the presence or absence of success avoidant tendencies or dispositions which would not depend on responses to such obvious cues as "Ann at the top of her medical school class" and hence would be less subject to conscious control. These include such things as

The development of the women's movement.

National policy and legislation directed at providing equal access and opportunity for women and minorities.

A "counterculture" rejection of traditional male values "competition, achievement, power" by young men at least at a conscious level.

Because of factors such as these, use of success specific cues, like the above to assess individual differences in motives are inappropriate and subject to conscious control. Men now may well show higher levels of fear

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of success type imagery and women decreasing levels to such cues making it extremely difficult to assess accurately the presence of a success avoidant disposition vs. a new value system.

The data so far suggest however that despite a new consciousness and removal of a number of legal and educational barriers to achievement in women, there remain behind several psychological barriers so deeply ingrained and hence so difficult to overcome that it prevents many otherwise achievement motivated and able women from walking through the doors now opened to them and from taking part in the mainstream of thought and achievement in our society. This applies to many male members of minority groups as well.

Thus the importance of developing an empirically, functionally relevant scoring system that would be free of conscious control on the part of the subjects and hence under the influence of current consciously adopted values which are not consistent with the internal dispositions in which we are interested becomes clear.

Chapter II

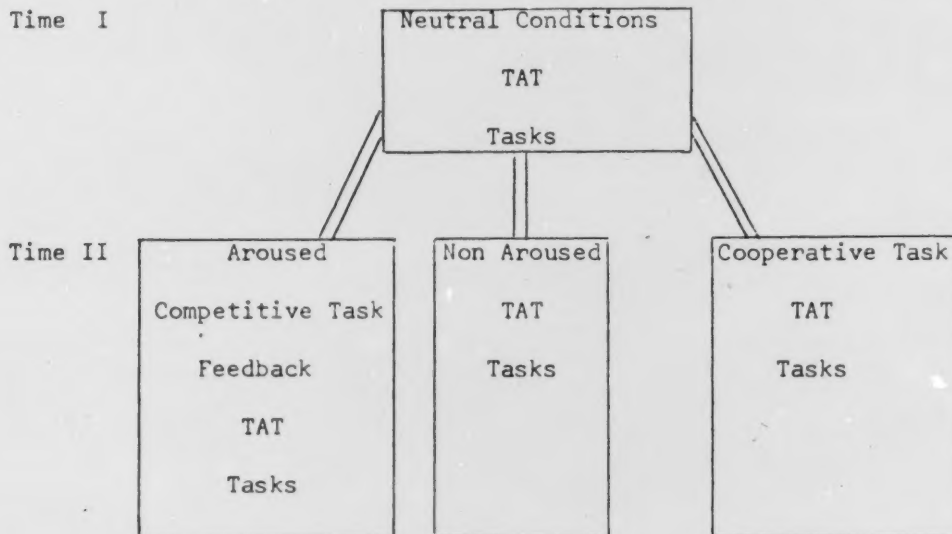
Methodology

The design used to establish an empirically derived scoring system for success avoidant motivation followed the traditional method used for developing a scoring system for approach motives such as that for the achievement motive, namely: to arouse the motive in question in one group of subjects with the proper experimental manipulations and then to compare the TAT stories they write under arousal to those written by a comparable but non-aroused group of subjects. (Atkinson, 1958) Differences in content observed between two such groups then become the basis for developing a scoring system to assess individual differences in the motive in question when stories are written under more neutral conditions.

The design used in this study was such that comparisons between groups could be made for developing a new scoring system and also individual differences in motive strength could be determined for the subjects on the basis of their stories written in an initial neutral condition. Their scores could then be related to various performance variables of interest.

All subjects were given a set of TAT verbal cues and a performance task in a neutral condition (Time I) (Appendix A). The sample was then divided roughly into thirds each group being assigned to either an Aroused, Non-Aroused or Cooperative Condition (Time II). [NOTE: We have not had time to properly analyze the results of the experimental cooperative condition so this part of the experiment will not be dealt with in this report in any depth. Furthermore, it is not essential for developing the new scoring system which is the primary purpose of this experiment.]

Various experimental manipulations, tasks and instructions were used in each of these conditions so that in the Aroused group, success avoidant motivation would be maximized for women subjects and in the Non-Aroused group success avoidant motivation would be minimal or at least less salient for them (and it would probably be absent in the cooperative condition). In each of the conditions at Time II subjects were given a new set of verbal TAT cues which had been matched with the earlier set they had taken under neutral conditions. (Appendix B) The TATs in the aroused condition were taken following feedback to each mixed-sex competition pair indicating that the woman had outperformed the male member in the immediately preceding performance task they had taken. Following the TAT they were then asked to work on a performance task which was similar to the one they had taken in Time I. This would allow some within-subject-analysis of possible performance increments or decrements as a function of having succeeded against a male competitor shortly beforehand.



Subjects

The subjects for the experiment were recruited through the Department of Psychology at the University of New Hampshire. All the subjects received course credits in the introductory psychology course for taking part in this experiment. Both males and females were recruited. 211 subjects in all were included in the study. Although success avoidance as a theoretical concept is not of necessity linked to any particular race, sex, age, group, etc. and may involve interactions between such factors, this study focused primarily on success avoidance in females for practical reasons. Only female subjects were given success feedback following competition in the aroused condition which provided the basis for developing the new scoring system. The men, by implication had failure feedback and the data gathered on them will be of interest with regard to studying male reaction to failure against a female competitor. There were 31 female subjects in the aroused condition and 28 in the non-aroused condition. These subjects were all undergraduates from many different majors and most were taking their first college level psychology course.

Neutral Condition - Time I

The subjects were contacted through their introductory psychology course for Time I, the neutral condition of the experiment. Two large groups following each other by an hour were run to complete this step in the experiment. At this time each subject was given a folder with his or her subject number on it which contained the test materials for Time I. (Appendix A) Each subject also signed his or her name to a control slip which would enable us to see that course credit was given for those who completed the experiment

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and would also help us to make accurate assignments for the second session. Subjects were assured that after these objectives were met the control slip would be destroyed and all of the experimental data would be treated anonymously (as was done).

At Time I subjects were presented with a TAT using verbal cues entitled "Cue Interpretation Task". (See Appendix A) One of the two male experimenters then read through the directions for their task with the subjects. Five cues were subsequently presented with 20 seconds given to read the cue and four minutes given to write the story. The cues presented to the females^{*} were:

1. CAROL IS LOOKING THROUGH THE TELESCOPE
2. JOAN SEEMS TO BE PARTICULARLY PLEASED
3. DIANE HAS JUST RECEIVED WORD THAT SHE IS ONE OF THE THREE STUDENTS IN THE STATE TO GET A PERFECT SCORE ON THE LSAT (LAW SCHOOL ADMISSION TEST)
4. LINDA IS LOOKING OUT AT THE SUNSET
5. BARBARA IS IN THE MIDST OF A HEATED ARGUMENT

The first two cues were considered neutral cues, the third a version of the fear of success cue which had been used before, the fourth a neutral cue and the fifth an experimental cue to see whether subjects would respond to aggressive stimuli as they do to competitive achievement cues, e.g., whether expectations about the consequences of such action would be more negative than positive.

During the presentation of all of the material at this session the two experimenters were neutral in their manner simply presenting the material in

* Similar cues were used for the males except male first names were used.

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a matter of fact fashion typical of any psychological experiment in which no attempt is made to either enhance or diminish involvement. After the TAT was completed the second experimenter began the Scrambled Words Test. (See Appendix A) He read through the directions with the subjects and then began timing them giving them two minutes for each of the five pages of the task. When this test was completed the subjects were asked to take out the "Test of Perception of Traits in Others" (which is not involved in the analysis of this data) and the "Basic Questionnaire" from their folders. The latter provided much information such as, occupation of father and mother, birth order, career plans, etc. (See Appendix A) After all of the subjects completed their questionnaires they were told we would be contacting them through a list which would be posted within a few weeks telling them when and where to come to the second session. (They did not receive course credit if they did not come to the second session.)

One month after the Time I session we returned for the Time II session. Subjects had been assigned randomly with a few exceptions necessitated by conflicts in their class schedule to the different conditions of Time II.

Time II - Arousal Condition

The Arousal condition of Time II was run in the following manner. As the subjects entered the room they were given a folder containing the testing material with their subject number on it. They were then told to sit at a certain pair of desks which had a specific number between them. Each pair consisted of a male and a female subject who were going to compete against each other. To make the competition as realistic as possible the verbal ability of each subject in the pair was judged by their performance on the

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Scrambled Words Test taken at Time I and only males and females with comparable levels of performance at this previous session were actually paired for the competitive condition. After being assigned to the pairs the actual arousal began. The experimenters were business-like and direct as in any achievement arousal manipulation. They began with the following statement.

"In this part of the experiment, you have been paired with someone who showed comparable ability to you on the first set of tests in the experiment. Today, you will be given two more tasks, both involving achievement in thinking quickly and efficiently. We have found that people do best when they have knowledge of the results of their efforts and can judge these against those of someone of similar ability. Therefore, we will announce the results of the first task for each of the pair immediately after it has been scored. Let me go through the directions of this task with you."

The subject then turned to the sheets headed "Memory and Intellectual Productivity: Arithmetic Problems" and read through the directions with the experimenter. (See Appendix B²) Immediately after this ten minute test the subjects handed in their test booklets. Two experimenters then began to score the booklets using fake correction overlays. While these two experimenters were allegedly determining the winning score for each pair the other experimenter ran a time filler test which was a group version of the Hand Test (e.g., showing pictures of a hand on a screen and then having the subjects describe in writing what it was doing. (See Appendix B³) As soon as this was completed the other experimenters acted as if they had finished scoring the Arithmetic Problems and could now announce who was the winner in each pair. Since we were attempting to arouse success avoidant motives in the female subjects without letting everyone know that this was the plan, the subject's code number rather than the name of the female member of each

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pair was used to announce the winner. This was done by reading the pair number and then the last two digits of the winner's "subject number" so that it would not be obvious that the female member always won. This manipulation might not have worked if many or all of the females had reacted with "obvious delight" but in fact only one subject manifested any audible or visual pleasure whatever and the experimenter charged with observing reactions of the subjects to the success feedback indicated a quite noticeable absence of expressed pleasure (very few smiles) and an increase in apparent tension.

After the winner in each competitive pair was announced the second set of verbal TAT cues was given to the subjects. (See Appendix B¹) The directions were read through again with them and exactly the same procedure and timing were followed as in Time I. The matched set of verbal cues was:

SUE IS LOOKING INTO HER MICROSCOPE

JUDY IS SITTING IN A CHAIR WITH A SMILE ON HER FACE

AFTER FIRST TERM FINALS, ANN FINDS HERSELF AT THE TOP OF HER MED SCHOOL CLASS

CAROL IS WALKING ALONG THE BEACH LATE IN THE DAY

AS A LEADER OF A GROUP OF MEN AND WOMEN, NANCY HAS THE FINAL SAY ON ALL DECISIONS OF THE GROUP

When finished with the TAT, one of the experimenters began the next task by saying "there is another measure of ability in thinking quickly and efficiently." The directions for the Anagram task were then read to them. (See Appendix B⁴) The total time given to them was eight minutes but they were instructed to place a check mark by their last production after five minutes. After finishing this task they were asked to fill out a general

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information questionnaire on how well they knew the person they were working against, how important it was for them to do well in the tasks, and whether they felt men or women usually did better on the tasks. Following the experiment all the subjects were debriefed.

Time II - Non-Arousal Condition

The non-arousal condition of the study began quite differently from the arousal condition. Since we wanted to get away from any competition in this condition and any mixed-sex group appears to generate feelings of competition, the condition was designed to relax subjects as much as possible. Subjects were not paired with anyone but were simply given their folder with the testing material when they came into the room and were able to sit anywhere. When they were all present the experimenter began by saying:

"As you remember the last time we were here we gave you a number of different tasks. Today we have some other tasks for you to work on. Open your folder and you will see that the first task is an arithmetic task.

"Bob and I recently designed this task and we need to get some general norms for a college population on it. Because of this we would like you to work at your own pace. We are especially interested in people working at their own rate as a measure to be included in a self-teaching workbook for younger people. It is important for us to get norms for different age groups. So work right along but at a comfortable speed. Let me read through the directions with you."

The subjects then turned to a booklet labeled only "Arithmetic Problems." (See Appendix C²) During the whole period of their manipulations the three male experimenters were friendly, smiled and tried not to give any impression of tenseness. No performance feedback was given and the same sequence of tasks in the Arousal condition was given to these subjects, e.g., the Hand Test and the same matched set of verbal TAT cues. The Anagram task in this

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condition was introduced by saying "Once again we have a task for which we would like to get general norms for a college population. The task will be to make up words from a master word. Work at your own pace. Now let me read through the directions with you." The directions were read (See Appendix B⁴) and to them was added "work right along but at a comfortable pace." Exactly the same five minute "check" procedure was followed with these subjects. A general information questionnaire was then filled out asking only how important it was to do well on the tasks and whether they thought men or women usually do better. Again, as soon as the experiment was completed the subjects were debriefed.

Analysis of TAT Themes

For purposes of developing a new scoring system the most pertinent analysis is a comparison of the TAT responses written by the thirty-one females in the arousal condition with those of the twenty-eight females in the non-arousal condition, with specific comparisons made on the three neutral cues - the first, second, and fourth cues rather than on the cues with success specific or aggressive content included in the group. The intention was to establish a scoring system for success avoidance which could be applied to any set of neutral cues and thus enable us definitely to get away from the success specific cues used in the past whose function was primarily to tap expectations which unfortunately were subject to conscious control.

The analysis of the TAT themes began with a thorough reading through of the stories produced by the female subjects at both Time I and Time II. After getting a sense of the diversity of themes written in the stories we began to conceptualize some of the important differences detected in the

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themes and to develop preliminary codes and categories. After this the different themes or categories were systematically organized and compared for presence or absence in the Arousal versus the Non-Arousal condition. Several attempts at organizing the themes so identified were tried resulting in a "Pre-Validation Scoring Category List" containing some forty-three different possible scoring categories with explanations of the categories and a large number of examples. (See Appendix D) This preliminary list of categories was worked on for clarity and communicability and then presented to other researchers to see how understandable the categories themselves were.

Three research assistants (who had helped to develop the scoring manual) scored all of the TAT stories written to the neutral cues at both Time I and Time II by the Arousal and Non-Arousal female subjects. Their reliability for the forty-three categories was quite high for a preliminary system (ranging from 68% to 92% agreement) and at this point all scoring differences were resolved jointly. The result was a better understanding of the categories and the problems entailed and the capacity to further collapse or condense categories into a more manageable and theoretically meaningful final system.

All stories were scored by all three researchers with final agreement being reached in a conference between the three. Any order effects of possible experimental biases were kept to a minimum by randomizing all the stories to be scored so that none of the researchers knew which condition the subject had been in. They also attempted to ignore any differences in Time I or Time II but since slightly different cues were used at the two times this could not be completely accomplished.

Special Note

In the process of analyzing differences in these forty-three categories between aroused and non-aroused subjects, an issue of both empirical and theoretical significance came to light. In the past the method of developing a scoring system by comparing differences in imagery between groups in which the motive has been aroused and those in which it has not has worked primarily in the case of positive approach motives like achievement, power and affiliation. In this case, however, we are talking about an Inhibitory motive which under arousal may suppress certain kinds of imagery and/or lead to defensive-coping kinds of imagery. Under arousal when subjects were faced with an outcome that might have negative consequences for them we know on the basis of what previous studies on "fear of success" have shown that suppression or inhibition is likely. This then seemed a particularly important consideration in light of the theoretical notion that it is precisely in those subjects with the greatest ability and strongest approach motivation that success avoidant motivation will be most readily aroused (Horner, 1968). In order to understand the functional significance of fantasy productions reflecting defensive and coping styles or certain suppressed categories it became important to relate these (and all) categories to changes in the performance of the subjects in the arousal group from Time I to Time II, a check which was possible by the design used. It did not seem appropriate to stop at a point in the analysis at which differences in imagery between the two groups were found without checking the functional significance of the categories so delineated. This was done before categories for the final scoring system were determined.

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Results

Appendix E contains summary of all data on all subjects arranged by sex and condition, much of which has not yet been analyzed given purposes of this report but which contains much valuable information for continued analysis.

Table I is a summary of the mean performance scores of subjects as a function of sex and later assignment to experimental conditions on the two performance measures most pertinent to developing and validating our scoring system namely, the Lowell Scrambled Words taken at Time I and the Generation Anagrams test taken at Time II.

Table I

Overall Mean Performance Scores of Subjects as a Function of
Sex and Assignment to Experimental Condition

<u>Time I</u> (Prior to condition assignment)			(Lowell Scrambled Words)		
<u>Arousal</u>			<u>Non Arousal</u>		
(N)	M	SD	(N)	M	SD
Females:					
(39)	48.97	18.99	(40)	42.75	15.99
Males:					
(38)	36.00	10.61	(44)	33.82	13.14
<u>Time II</u>			<u>Cooperative</u>		
(N)	M	SD	(N)	M	SD
Females:					
(39)	39.9	7.41	(40)	38.6	9.50
Males:					
(38)	34.7	8.24	(44)	32.2	9.18

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It is apparent in this table that the greatest overall impact on performance appears to be for the women in the arousal condition.

It is also of interest to note that the variance is substantially reduced when subjects are actually performing within a condition (Time II) than under the general neutral condition of Time I. This suggests that the experimental manipulations did take effect.

Further evidence that the experimental manipulation took effect is found in Table 2 showing the responses of the thirty-one females in the aroused and twenty-eight females in the non aroused conditions for whom complete data exists to the question how important was it for you to do well on the tasks in this part of the experiment?

Table 2

Female Subjects Self Report as to How Important it was
to do Well on Tasks at Time II

<u>Condition</u>	M	SD	N	
Arousal	53.55	21.71	31	t = 1.88
Non Arousal	43.39	19.78	28	p = < .05

In order to consider the relative impact of the various scoring categories on performance as a function of condition, performance change scores were determined for each subject by converting their raw scores to t-scores for both the Scrambled Word Test from Time I and the Anagrams test from Time II.

The t-scores of the performance at Time I were then subtracted from their performance t-scores at Time II. Since most people can quite readily

produce a fair number of words in the first five minutes, it seemed that the best measure to use at Time II as an indication of performance level that would best reflect level of motivation was the number of words generated in the last three minutes of the task. Because most of the obvious words generally would be used up in the first five minutes these last three minutes should require more effort and hence show a greater relationship to motivation. (When the anagrams test and scrambled words are run under the same conditions they correlate very highly ($r=.69$ for females, $.74$ for males, Horner 1968). The value of each of the categories for predicting performance decrements from Time I to Time II was determined from the themes written in response to the TAT at Time I for both the aroused and non-aroused groups.

Each of the forty-three categories was tested as an independent variable along with the condition (arousal or non-arousal) in an ANOVA with performances change as the dependent variable.

The categories which approached significance in these ANOVA's were then put together in a simple regression equation to predict the performance change of the subjects. For an example of regression results see Table 3 below.

Table 3

Regression Analysis Results Leading to Final Scoring System

BETA COEFFICIENTS

Performance Change

[t score difference
T₁ (Lowell) -
T₂ (last 3 minutes Anagram)]

<u>Initial Category Name</u>	<u>Coefficients</u>	<u>Final Category</u>
Non-Contingent Disaster	-12.67	Non Contingent Negative Consequences
Interpersonal Engagement	- 5.92	Same
Contingent Disaster	- 4.76	Contingent Negative Consequences
Relief	- 3.58	Same
Un-doing	- 2.74	Absence of Instrumental Activity
Overelaborated Affect	+ 2.64	
Simple Present Interpersonal	- 2.95	Absence of Others
Blocks	- .31	

R² (Variance Explained) .44

F 2.16

P .07

The result of this combination in the regression was six categories which in combination predicted 44% of the variance of the performance change scores. Therefore, these six categories became the basis for the new scoring system for success avoidance. The six categories are: (See Chapter 3 for complete Scoring Manual)

	Weight
Contingent Negative Consequence	+2
Non-contingent Negative Consequence	+2
Interpersonal Engagement	+2
Relief	+1
Absence of Instrumental Activity	+1
Absence of Others	-2

The weights given to the different categories were determined by the weights in the regression equation.

To check the validity of these categories and weights they were applied to a completely different sample of 28 subjects. These subjects had eight years before taken TATs under neutral conditions and performed on comparable tasks under neutral and competitive conditions. The actual cues used in their TATs were in fact slightly different from the cues used in this study. Nevertheless, the stories written to three somewhat neutral cues were scored for each subject using the six new weighted categories, and it was found that the coded scores predicated from 36% to 42% of the variance in the performance change for these subjects, depending on whether continuous or categorical scoring is used, (see pages 16-17 of Scoring Manual in Chapter 3) as well as correlating very highly with prior "fear of success" classification of the subjects based on the former scoring system using success specific cues.

Table 4 shows an analysis on this former data using continuous scoring.

Table 4

Regression Analysis of New Scoring Applied to TAT's taken
Eight Years Before on Performance Change at that Time

<u>Categories</u>	<u>Coefficient</u>
Contingent Disaster	-2.69
Non-Contingent Disaster	-1.43
Interpersonal Engagement	-2.6
Relief	.41
Absence of Instrumental Act	-1.23
Absence of Others	4.96
Regression Constant	5.29
R^2	.36
F	2.00
P	.112

with 6 and 21 degrees of freedom

Hence for two totally independant samples the new scoring system predicted performance decrements for females in a competitive situation, compared to their own performance in a neutral setting. As is pointed out in the manual (p. 17) it does not seem to make a difference whether or not the categories are scored only once for the whole set of stories per subject or if scored for each story and then summed across all the stories. Both scoring methods predict performance change very well.

Chapter III

Scoring Manual

This chapter contains the full Scoring Manual containing descriptions of the categories, scoring criteria, fully scored examples, and a practice set of stories with the expert scoring following so that other researchers can learn how to score for the motive to avoid success. This manual was presented at an American Psychological Association workshop during the convention in Montreal in the Fall of 1973. The workshop had a large attendance and response to the manual was very good. Brief theoretical comments made at that meeting prior to the workshop are worth including at this point:

The research leading to the development of the scoring manual presented here is only part of a larger ongoing project supported by the Office of Education during the past two and a half years. It is a study concerned with the Developmental Correlates, and especially the Situational Determinants of Success Avoidant Motivation and Behavior.

In this study, the motivation and behavior of over 200 college men and women were observed under three very different conditions:

1. a nonspecified (neutral) mixed-sex competitive condition;
2. a condition in which mixed-sex competition was preceded by success for women subjects; failure for men subjects;
3. a mixed-sex cooperative condition.

Although many important theoretical and empirical questions are involved in the study, only those aspects of the overall design which are directly relevant to the specific purposes of developing this scoring manual will be discussed, [namely that of the female subjects under the first two conditions].

Before actually presenting the scoring system or discussing its development, we would like to take a very few minutes to stress (in outline form for the sake of time) several important theoretical issues that should be carefully considered before the system can be effectively utilized.

- I. Motive to Avoid Success is a theoretical concept inextricably tied to an expectancy-value theory of motivation. It cannot be separated from, nor should it be used apart from the theoretical context within which it was developed, [namely the Expectancy-Value Theory of Motivation].

In this theory, the behavior of an individual in an achievement situation, or any other situation for that matter, will ultimately be determined by the EXPECTATIONS he/she holds about the nature and probability of the outcomes or consequences of his/her actions, and by the incentive value (strength of attractiveness or repulsion) of these consequences to him/her in light of the situation and the personality of the individual involved.

What we are talking about here is the significance that an activity or an outcome in a particular situation (say success in a competitive situation) has for an individual as a function or complex interaction of his/her various motivational dispositions).

The concept, Motive to Avoid Success, was initially conceived at a time in the development of a theory of achievement motivation when it had become obvious that the strength of motivation to

undertake and to do well at achievement oriented activities was a much more complexly determined function than previously suspected. As our understanding of the determinants of such behaviors as levels of aspiration, performance, and persistence shown by individuals in achievement directed activities became more sophisticated, the number of variables involved increased, and the interaction between them was clarified. It was at this time that the Motive to Avoid Success was introduced, NOT as an entity unto itself but as one more relevant variable to be added and considered in conjunction with an already increasingly complex network of relevant motivational variables (including achievement motive, motive to avoid failure, and such extrinsic factors as n affiliation, etc.).

(repeat)

The Motive to Avoid Success was introduced NOT as an entity unto itself but rather as one more among several relevant personality dispositions, all of which interact to give us the final strength and direction of one's motivational dispositions in any particular situation.

Within the expectancy-value theory, motivation and goal directed tendencies may be either approach or avoidant in nature depending on whether the expected consequences of engaging in an activity or attaining the goal in a particular situation are positive or negative.

Any avoidant motivation (anxiety) that is generated by the expectation of negative consequences in any one situation will inhibit the expression or manifestation of any positive motivation toward the goal that is simultaneously aroused in that situation. Hence, once aroused, motivation to avoid success inhibits positive achievement motivation.

- II. Although introduced to help explain the major unexplained sex differences found in prior studies of achievement motivation, as a theoretical construct the Motive to Avoid Success is no more a sex linked trait by biological necessity than are the Motive to Approach Success, the Motive to Avoid Failure, the Motive to Affiliates, or the Motive to Avoid Rejection. Any sex differences found or predicted should be considered as a function of socio-cultural conditioning or prior learning or of one specific situational factor.

E.g., Jackie Hamilton will refer to her studies showing Motive to Avoid Success imagery is more characteristic of black men than black women.

Work done with Japanese subjects suggests Fear of Success is aroused for both men and women in anticipation or reaction to successful competition against people older than themselves.

- III. Another area of confusion: Motive to Avoid Success becomes directly linked or confused with the particular sex role orientation of the subject.

In accordance with the expectancy-value theory, subjects with nontraditional sex role orientation (in work, activity outside the home) who aspire to excellence in nontraditional areas may well be more adversely affected by an aroused Motive to Avoid Success than subjects with traditional sex role orientation who neither want nor seek success in such areas (hence, no reason for conflict). This is not unlike the theoretical relationship I have claimed exists between achievement motivation and Motive to Avoid Success.

E.g., in order to expect negative consequences in a situation because of success, the essential element for arousing the Motive to Avoid Success, one must first realistically expect success as a function of high levels of ability and/or motivation). Clearly, if you neither want nor can attain success, the expectancy of negative consequences because of success would scarcely be a salient concern.

- IV. Motive to Avoid Success is NOT synonymous with A.

WILL TO FAIL: Though there may well be such a motive, it would be theoretically quite different from Motive to Avoid Success and could not be measured with this system. In the expectancy-value theory, a will to fail would be a positive motive toward failure guided by the expectancy that positive consequences would result from failure. This is NOT the same either theoretically or functionally as Motive to Avoid Success. The presence of the Motive to Avoid Success, when it is aroused, inhibits the performance of subjects otherwise positively motivated for success because they expect negative consequences to follow the expected success.

In summary:

1. The Motive to Avoid Success is not an entity nor a measure unto itself. It is a theoretical construct to be used in conjunction with an expectancy-value theory of achievement motivation within which it was conceived.
2. It is not a sex linked trait nor should it be confused with a particular sex role orientation.
3. It is not synonymous with a Will to Fail.

We raise these issues primarily because of the apparent confusion in a great number of studies done that we have seen, and the dangerous, ever increasing pattern of utilizing the tool independent of the theory, even without a clear understanding of the construct and the measure itself, and how both of these relate to each other.

SCORING MANUAL
for
An Empirically Derived Scoring System for
Motive to Avoid Success

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An Empirically Derived Scoring System* for Motive to Avoid Success

SCORING MANUAL

I. SCORING CATEGORIES

Scoring Weights

In the parentheses below each category are the names of the closest corresponding categories of Horner's original (1968) present-absent scoring system for "fear of success imagery." The prior system was used to tap subject's expectations about the consequences of highly successful achievement and therefore only very explicit success specific cues were used. E.g. "Anne finds herself at the top of her medical school class." This system does not require such specific cues.

A. CONTINGENT NEGATIVE CONSEQUENCES +2

B. NON-CONTINGENT NEGATIVE CONSEQUENCES +2

For both A and B (negative consequences because of success, negative affect because of success, bizarre, inappropriate, unrealistic or non-adaptive responses to the "success" situation described by the cue)

C. INTERPERSONAL ENGAGEMENT +2

(instrumental activity away from present or future success)

D. RELIEF +1

(any direct expression of conflict about success)

E. ABSENCE OF INSTRUMENTAL ACTIVITY +1

(instrumental activity away from present or future success)

F. ABSENCE OF OTHERS -2

(opposite of fear of social rejection)

NOTE: This is a counter indicative category

*The system presented here is based on data from female subjects only. Verbal cues were used.

SCORING CRITERIA FOR EACH CATEGORY

NEGATIVE CONSEQUENCES

To score for negative consequences whether of the contingent or non-contingent category, there must be movement somewhere in the story toward a situation which could be experienced or interpreted as worse than the original situation. The initial state can be positive or neutral (or even slightly negative) but the consequence of movement somewhere within the story or preferably the overall development of the story can be characterized variously as tension-producing or involving failure, loss, frustration, hopelessness, deprivation or disaster.

The movement and/or the negative consequences may involve:

1. Tension: increase in negative affect usually explicitly stated (anxiety, regret, lament...) or being afraid that something might be lost or blocked.

"She has been in the building speaking with Paul...Paul is my fiancée...Why is she smiling so wryly? And why is she so dressed up and acting so confident? I feel tears on my cheek..."

"Sue is late for class. She's trying to find the amoeba on the microscope slide that her instructor has just pointed out. She is shaking and nervous. Suddenly she realizes this is a zoology exam. She had forgotten all about it. How could she? Her instructor is very strict. He wouldn't understand if she tried to explain. She feels panicky."

Note: In this last example, though the movement is minimal, it does progress from bad to worse. Note also that some marginal statements ("late for class," "forgotten... Suddenly realizes...How could she?" "strict...wouldn't understand") could also have been considered as scorable negative consequences. This story, however, also has a clear statement of tension.

2. Deprivation: inability to attain or keep a desired goal, having

something one wants taken away, lost, or destroyed by any source at all; a recognition that such blocks as natural laws, personal failures, etc. will prevent one from moving toward or attaining a desired goal.

"Sue is looking into her microscope when someone bumps her. Why is it, she thought, every time I try to do an experiment something goes wrong, someone bumps me causing me to break a plate."

"...She feels sad though because everyone is already dead and she will be alone for the rest of her life."

"She is examining a culture in a biology class. Her partners are competing for a contest in school. Because they had done such remarkable work before, they were eligible to enter this contest. They are all anxious for the experiment to turn out right. They know theirs is best. They may win and go to a science fair in Europe. But alas!--too much confidence, one partner forgot to keep record on his control group."

3. Disaster: acts of God or man that take away or ruin something, often appearing as a bizarre and/or sudden ending.

"...they left together in his car--not noticing Linda's father parked across the lot in his station wagon. He pulled out and followed them. When the teacher noticed, he started to drive quickly to escape. He ran off the road and the two of them died--together--as the sun went down on the otherwise tranquil world."

"Sue is a medical technologist. She is looking to see how many white blood cells are on a slide. She has seen millions of them before, but this slide is special. It is a slide from her sister's blood. Her sister has too many cells and has leukemia..."

Notes and Scoring Conventions

1. Negative consequences are scored when they occur for any character in the story, not only the main character.
2. Movement toward increased tension, deprivation, or disaster often occurs quite suddenly and is encapsulated in a single sentence. Frequently it is the very last sentence which gives the story a downward turn, and regardless of what the rest of the story was like, this is enough for scoring negative consequences. For example, the very last sentence of an otherwise positive story: "She dropped the glass and the experiment was ruined." or "Unfortunately he was killed in a plane crash."

3. Descriptive statements of difficulties, blocks, hardships or disasters that merely function to set the stage for the rest of the story are not scored. These generally occur in the first sentence and are followed by improvements in the situation or some more definitive negative consequences.

"Linda is all alone and yes, she is lonely. Today was just a perfect day at the beach and now it has come to an end. The flaming, orange sun slowly sinks behind the ocean. Its bright and brilliant rays shine down upon the water. The sun is going to find peace and rest just like Linda's brother who was killed in Vietnam."

Note: The statement in the first sentence is setting the stage for the rest of the story and, while negative, is not scored as a negative consequence. Note also that it is the final statement of the story that is scored and not the progression of events being described.

4. Things that "get in the way" of instrumental activity such as interruptions, physical blocks and other obstacles in stories where there is no movement are not scored.

"Sue is looking into her microscope. She received it for Christmas a few weeks ago. She finally has time to look at the blood stain she took a few hours ago. She has been interrupted by many people. She sits down and views her slide and is adjusting the lens as her sister enters the room. All Sue wanted was a little time alone."

5. Situations where there is an explicit statement of someone's involvement with or persistence at an instrumental activity such that the deprivation or displacement of the first person comes about because someone else wants to do the activity are not scored as deprivation. This is especially clear when the activity's function is to satisfy a "need to know" or curiosity goal.

"Carol is looking through a telescope because she is a member of the astronomy class that is on a field trip to a local observatory. Carol is using the telescope because each member of the class is being given a chance to look through the telescope as they have never had the chance to use a telescope of such high magnitude before...Carol is so excited that she doesn't want to stop looking through the telescope. And she will probably have to be told to let someone else have a turn."

"Carol is looking through the telescope. Her younger brother,

Teddy, is waiting for a chance to look through it. But, Carol is fascinated by the boy in the window of the house next door. Teddy wants to look at the mountain that is near their house. After waiting 20 minutes, Teddy finally pushes Carol away and get his chance."

6. A number of stories contain numerous fluctuations up and down, and we have termed these "zigzag" stories. If there are several shifts between positive and negative movements so that neither clear negative consequences nor "relief" can be scored with confidence, the story is not scored for negative consequences. The following examples illustrate this oscillation phenomenon:

"Barbara is a freshman. She's tired, liked chem in beginning. Now she's sick of so much lab. Chem has nothing whatsoever to do with her career plans. She had to take chem to fulfill a requirement. Thought she'd do terribly, actually is succeeding quite well, but isn't really working at it. She feels guilty. So she's going back. She'll put in time and appease guilt feelings. She'd just as soon this semester was over with but she doesn't want to go home for summer! She'll put in time, will really accomplish nothing. She doesn't have to work to do well. Is terrifically lazy."

"Anne is happy. Sort of. She is in the lunchroom with lots of people, but doesn't feel them around her. She feels separate. She's happy like usual, but not really because nothing good has happened today. Al didn't speak to her at breakfast. Nobody wants to be with her, help her. She's happy because that's the only way she can go on living. If she's happy about the myriad of wonderful little things, then the big ones don't hurt so much. Al will smile at her at lunch. That won't make any difference. She feels like a pawn, a body to him. He's cold, hard. She wants to help him but can't."

Negative Consequences fall in one of two scoring categories: Contingent and Non-contingent.

A. Contingent Negative Consequences (+2)

When the tension, deprivation or disaster comes about because of something about the character involved:

1. Personal characteristics which must be explicitly stated

"...In an effort to become popular, Joan took to smoking and drinking extensively. There seemed to be no problem at first, however, as time wore on Joan became dependent upon smoking..."

"She has always been clumsy...the key test tube was broken."

2. Actions

"...She killed herself..."

"Carol, what are you doing watch out for the telescope, it's tipping! Crash. The telescope laid shattered on the floor. Carol looked forlornly at the professor and began to cry."

"...She was looking at some cells of a plant, when all of a sudden she lost the focus..."

3. Failure to act (e.g., forgetting)

"...Now she doesn't study much anymore. The next semester Joan flunked out of med school."

"But...alas!--too much confidence, one partner forgot to keep record on his control group."

"...She bent her head over to see how far away the slide was from the edge. In so doing she forgot that she had left the Bunsen burner on. Her hair was singed a little but she was not hurt otherwise..."

Note: To be contingent, the fault for one's suffering must be one's own.

B. Non-contingent Negative Consequences (+2)

Something that comes about through the impingement of external forces:

1. Accidents and acts of God (floods, earthquakes)

2. Objects or concrete events (time runs out, paper is missing)

"...She feels she has plenty of time. She will sketch the drawings carefully at first, and as time runs out, she will be tense and make more hurried drawings and copy details from her text book."

3. Other forces not explicitly tied to the personal characteristics or the fault of the character, on or to whom the negative consequences impinge or occur.

"...Why is it, she thought, everytime I try to do an experiment something goes wrong, someone bumps me

causing me to break a plate."

"Sue is looking into her microscope as she watches the tiny organisms moving around. It wasn't long ago when she wouldn't have even known what these were. Now, though, she is a technician and looking at a patient's tissues. She liked Mrs. Smith and was hoping that she wouldn't find what she was now looking at. These tissues were definitely cancerous."

"...Hand in hand they both turn and walk down the beach. Each tries to hold on to this moment. For tomorrow Tom leaves for Vietnam. Linda heads for school. Neither wants the other to leave, each walk silently with nothing to say..."

Note: In the last example, the causes of the unwanted separation are out of their control: the negative consequence for Tom is Linda heads for school; the negative consequence for Linda is Tom leaves for Vietnam.

Notes on Specific Scoring Conventions

- a. If the responsibility for a consequence is mixed, by convention it is scored as non-contingent.
- b. "Probably" or "maybe" statements should be scored as if the events happened.

"...Soon Carol's friend will become impatient and maybe even angry because they had to put some money in the telescope..."

"Probably it will rain and she won't be able to go."

- c. Do not interpret motives. Score the language actually used in the story. "She ruined the experiment" is an active statement and is scored as contingent. "The experiment was ruined" (without other statements connecting this outcome to an actor) is a passive statement and is scored as non-contingent.

"Joan comes walking into the Soc. Sci. Center looking very pleased. She has been up most of the night writing a paper for history. She had put a great deal of work into it and was confident of a good grade. She reached into her pocket-book for the paper only to find it missing. Retracing her steps, she found the neatly typed paper lying in a mud puddle. Very upset, she returned to the building and found her instructor."

Note: The story does not say "she lost the paper" and is

therefore scored as non-contingent negative consequences.

- d. Both contingent and non-contingent negative consequences may be scored once each per story. However, the exact same sentence or set of words in any one story cannot be used for both categories.

C. Interpersonal Engagement (+2)

Interpersonal engagement is scored when two or more specific persons are clearly involved or occupied with each other in the story. There are two aspects to this engagement: a.) it must comprise a major goal in the story--i.e., an interpersonal or affiliative goal must be as important as an achievement, task or power goal, if mentioned; and b.) there must be an active concern with this interpersonal goal or activity toward it.

1. Affiliative Goal Orientation

The goal of the story (or one major goal in the story) must explicitly be affiliation with another. It may be either negative or threat-oriented (e.g., dealing with an interpersonal problem) or positive and/or goal-oriented (e.g., wanting to become closer to another). Sometimes the existence of these goals is not clearly stated and must be partially inferred.

In the first example below, the major concern of the story is with the relationship between Carol and the teacher. The second example does not have a clear interpersonal goal and even though an interaction occurs, it is in the context of the far more important goal, namely the task at hand. Thus, the first story below is scored for interpersonal engagement, while the second is not. The last three examples involve positive relationships and illustrate how interpersonal goals may be inferred if the hint is strong enough.

"Carol is looking through the telescope. She is in zoology lab. She is late. They're frantic because she forgot...She wants to speak to the professor. He casts her a bad stay-where-you-are look. Is he as mean as he looks? She wonders. I've heard some awful things about him. Never tried speaking with him. Shall I tell him my problem?..."

"Sue is in biology class and she is looking at a slide of bacteria. Sue realizes she must be able to identify correctly every form, or she will flunk the exam. She needs a good mark if she is to continue in the course. Mr. Potter, her professor, has warned her about her need for a good grade, and he feels she can achieve much more than she already has."

"He decides to have a good time tonight and calls his girl friend and makes a date..."

"...She is a biology major at UNH and really enjoys school. Her future ambition is to become a doctor. Mr. Mackie is her professor who is a very kind and extremely intelligent man. He is so willing to spend extra time with any student who needs the help. Sue digs "bio" and I'm sure you can see why!"

"Judy just read a letter from her boy friend--saying he was coming up to see her this weekend at school...Now they can go to the hockey game, the Mil-Arts Ball and out to dinner with her parents on Sunday...Now she'll have to pick up the apartment and tell her roommate it's her turn on the couch this weekend. David hadn't been up for three weeks."

If the interpersonal activity of goal attainment is a considerably less developed theme than is achievement, power or task-oriented instrumental activity ("doing" something), the story is not scored for interpersonal engagement. In the first example below, Judy seems much less interested in Jack than in the snow. At least the relationship between them is not the focal point nor the key theme developed in the story. Thus, it is not scored for interpersonal engagement. The second example, on the other hand, contains a number of other processes (making mistakes on the job, living on his own away from parents), but also includes as a major goal the interpersonal relationship between the brother and sister; this example is scored for interpersonal engagement.

"Judy is thinking about the beautiful day she spent yesterday. She remembers how her and Jack went to the mountains and sat and watched the snow come down and cover the trees and ground. She remembered how happy it made her feel when it snowed. She loved the snow. Then she remembered how they went sliding down a hill on a toboggan. This was a great thrill--to enjoy the new snow."

"Judy received a letter from her brother in California and he is telling her about the first day on the job and how many mistakes he has made. She feels lonely that he has gone out there since he was her only sibling, but felt that he had to start to live on his own away from their parents. He has also invited her to come out and spend some time with him when he gets settled and she is smiling with happiness."

2. Kinds of Activity Scored as Interpersonal Engagement

a. Verbal Mode: "Dialogue"

Sometimes the stories are written in dialogue form, which clearly makes the present interchange of the story conspicuously important. In the following example, even though there are other sorts of actions going on, the interpersonal engagement, especially with Bill, stands out as being of primary importance.

" 'Bill, how did you do on your physics test?' 'Oh, about the same as usual, D+; I don't expect to do much better than that. How did you do? You look like you did fantastic.' 'I did. I can't believe it! My first B in physics! You know how bad I've been doing this term with two D's and an F and I pull a B on the last test of the term.' 'How'd you manage that?' 'I finally got up enough nerve to ask the professor for some help, and he got me a private tutor who knew exactly what I was doing wrong.' "

The verbal mode is evidenced in other ways than through dialogue--common verbs showing interpersonal engagement are the following: tell, ask (a question, for a date), say, suggest (what to wear), announce, urge, invite, convey (thoughts), listen, discuss, talk to, call and phone.

b. Non-verbal Mode

Stories also describe interactions which are non-verbal. Common verbs used are as follows: wait for, come by, pick up, flirt with, approach, meet, join, be with, visit, love, kiss, take (to movies), help, show (appreciation), present, receive (presents), share, settle and make (happy, mad, friends).

Notes and Specifications

It is often difficult to assess just how the common verbs listed above are being used, that is, whether anything specific is being done. Caution must be taken to avoid the cases where these or similar words are used to describe an interchange where there is no interpersonal involvement at all. For example, a teacher may briefly tell a student about an assignment but without a clearer development of interpersonal involvement, the verbal interaction is not enough to warrant a score in this category (see also the example of teacher's warning above). A helpful rule is that the relationship have some effect on one or both parties, as in the experience of external

press. E.g., one of the common father-daughter stories:

"Carol's father had always been interested in astronomy, and consequently he was constantly urging her to share in his interests. She, being 19 years old, felt as though she could use her time more wisely; pleasurably by doing other things of her own interest. However, Carol, being an only child, had not the heart to deny her father's request to gaze at the stars through his telescope. Therefore, she sacrificed a good time for him."

D. Relief (+1)

Relief is scored when a relative tension or deprivation state is suddenly (sometimes magically) alleviated, often in a manner incurring surprise. There must be movement in the story.

"It had been so long that Judy was sick that she became discouraged, pale, and thin. She bore the pain daily, but she occasionally broke down to tears when the pain intensified. Suddenly she walked into our room and sat down in a chair, smiling. 'It's gone,' she said. 'The pain is gone, and I'm healthy again.' "

"The tests were passed back to all in the chemistry class. Joan's paper finally reached her, she was afraid to turn it over, she thought to herself and wondered if she had studied enough. Joan finally got the courage and she turned her paper over. To her amazement, she had gotten an A- on the exam."

Although relief generally occurs at the end of a story, it need not necessarily do so. It may just as well occur earlier in the story as long as a prior state of tension has been established.

"Linda is sitting in her bedroom looking out at the sunset. It seems relaxing to her after such a busy and hectic day..."

Some stories seem to end in a symbolic "whew!" or to have the quality of a great breakthrough or burden lifted, a longing satisfied.

"Joan is married to Jean and for many years they've been trying to have children. Well today she just returned from the doctor's and found out that she was pregnant. She feels beautiful sensations as she and her husband have longed for a baby ever since they were married. In 9 months Jean and Joan will bring a baby boy into the world!"

"Carol is looking through a telescope and sees a strange-looking object. She realized that this is the U. F. O. that

everyone has been trying to locate for the last 200 years. The problem is that the object is moving and she has to follow it with the telescope. But she wants to call the UFO Bureau and report her findings. She can't leave the telescope. She is in a state of confusion because she wants the money, the \$100,000 reward. All of a sudden out of the clear blue sky her husband comes in the room and Carol's husband calls and they live happily ever after."

There must be no clear statement that an individual's efforts led to the positive outcome. However, if step-wise positive striving (instrumental activity) to ameliorate tension is mentioned in the story but rewards are completely out of proportion with the effort or somehow magically increased, it is still scored for relief.

"Judy is really pleased with the results. Her instructor just handed her the paper she and her classmates had passed in two weeks before. Much time, work and effort has been put into it. She was secretly hoping for an A but didn't quite expect it. Well she did get one and was very happy about it..."

Note: The goal-oriented activity here is clear, but the fact that she did not really expect to get an A but got one anyway (increasing her positive affect) qualified this story for relief.

"...As she watched the sunset, she thought about all her problems and how maybe she could solve them all. She tried to think of happy things later on and became filled with joy at watching the sunset..."

Note: The above story is marginal. The extent of conscious voluntary attempts to solve her problems is unusually extensive; but the positive outcome ("become filled with joy") is both the effect of the workings of an external stimulus and out of proportion to the moves she makes to solve her problems.

E. Absence of Instrumental Activity

In scoring a story for this category, the judgment to be made is whether instrumental activity is present or not. The following are the definitions and criteria for assessing presence of instrumental activity.

Instrumental activity is any overt or mental activity by one or more characters in the story indicating that something is being done about attaining a goal. There are various goals which may be stated or easily inferred: the first example below shows an achievement goal, the second example a curiosity goal.

"...Four years of your life doing hard work, trying to get to

this end with good grades to get into law school..."

"...Carol is a very excitable person and is extremely excited when she looks through the telescope because she is amazed at how close the stars and planets seem to appear. And she wonders how they came to be this way."

Great care must be taken not to make inferences of actions from described end-states. Also statements of one's condition or situation are not instrumental activity. E.g., "while driving back from the beach" describes a setting and, unless clearly connected with a goal of some sort, does not indicate instrumental activity, nor do statements that describe outcomes or effects. Thus, the statement "Just the fact that she knows she finally put him down, set him in his place," is not scored. It merely describes a state of affairs, the effect of an action on another. Since it does not describe the action itself, it is not scored as instrumental activity.

Also, instrumental activity is not to be confused with the mere presence of verbs. For example, the statement, "She made a contribution to the world," would not be scored because only the effect of the person's actions has been described and not the goal toward which the person is striving. The verb 'made' is insufficient since it is not stated what is being made, or what the making of it entails. On the other hand, "She was working on her project, which would be a contribution to the world," would be scored since the actual activity is explicit in the story. In addition, the statement, "She was thinking about the solution to the problem, which would make a contribution to the world," would be scored as instrumental activity toward the goal of solving the problem ('thinking' rather than 'doing').

Stories where several people are interacting, and/or the goal is not clear, and/or the verbs involve action which is not specific (like help, meet, call up, etc.) are usually not adequately focussed toward a goal to meet the requirements of instrumental activity. E. g., "John is helping Susan" is not scored. These are often scored as interpersonal engagement (see that category). If "John is helping Susan " do something, it is scored. In the following example, however, the goal of one of these verbs is clearly toward a specific goal (a focussed microscope) and therefore it is scored. Note also that "has to write" describes an assignment--a setting and not an action.

"Sue is in biology class and has been asked to look at a paramecium slide under the microscope. She has a lab partner and each table has an instrument. She has to write what she observes down for her report which will be collected after class by her teacher who is helping the students focus their microscopes."

There are a small number of common verbs which are difficult to score in this category: thinking, wondering, wishing, imagining, watching, and so on. Special care must be taken with these apparently passive activities to evaluate whether a goal exists in the story and whether the verb shows something being done about attaining it. Also difficult is the case of "curiosity" or "need to know." In the first of the two examples below, the character is not "wondering" aimlessly but directedly (how the cells came into being, secrets of life); thus, instrumental activity is scored as present. In the second example, however, "wondering" involves something other than a search for knowledge or resolution of curiosity and therefore does not qualify as instrumental activity.

"Sue is looking into her microscope, wondering how those tiny cells and bits ever came into being, a conglomeration as they are now...Sue is now glad that she took this lab biology course for without it she would have never known the underlying secrets of life..."

"Carol is looking through the telescope wondering where the man in the moon is. Her mommy always talks about him but poor little Carol never does get to see him. And when she's lonely like tonight and needs a friend, she really wishes she could see him and have a nice chat. But again, Carol has ~~never~~ heard the man in the moon talk back. She can only hear of him from grownups. Carol can't wait until she grows up so that she may find and see the great big man on the moon."

Absence of Instrumental Activity

No statement of any instrumental act ('thinking' or 'doing') toward attaining a goal within the story. Also scored when the only instrumental act is in the first phrase in the story and is essentially a restatement of the cue material. Commonly a story that is a description of a state of 'being' (vs. the 'doing' of instrumental activity).

"In the matter of an instant the bare branches of the trees were transformed from their stark presence into a multitude of tiny veins endlessly reaching toward the vibrance of the hues which were above them. The rich warm colors of the sun provided a feeling of pulsating life for Linda as she lay beneath the trees gazing into the sunset. It would seem that climbing these massive branches should deliver her into the warmth of the sun yet she knew that even the uppermost reaches of the tallest tree could not serve to make her one with heaven."

The subjunctive tense used above ('would seem...should') does not qualify as the description of overt or mental activity. The

following example has instrumental activity in the first sentence, which is merely a repetition of the cue; the rest of the story does not contain instrumental activity, so it is scored for absence. Also, the action in the story exists without reference to any goal--"has just come back from a visit" is neither toward any goal nor away from a clear goal.

"Sue is looking through her microscope in the chemistry lab. She isn't really working though. School is becoming very difficult for her and she has just come back from a visit with the assistant principal and is quite upset. The teacher in this class is very hard and Sue is so far behind in her work she feels the situation is hopeless. Also, her boy friend has this class with her and he tends to be a brilliant student which makes matters even worse."

F. Absence of Mentions of Other Persons (-2)

(This is a counter-indicative category.)

Absence of others is scored if no character or group other than the person specified in the cue is mentioned in the story. Stories about animals count as though they were people (second example).

"Carol has had many problems lately, so since she likes the beach so much, she decided to go down and take a walk along it one late day. She thought about all her problems, and the rush of the water and the quietness of the day made her feel better even though she had no solutions."

"Ann is sitting on the antique chair smiling at Tonka Ming--Tonka is her siamese kitten. He has been stalking a ladybug across the carpet and when the ladybug suddenly flew away, the little cat had sat back and howled disconsolately. Ann smiles at Tonka's predicament. She had wanted the bug to get away. Yet she was sorry for the frustrated big-game (Not scored) hunter. She will take him (Tonka) into the kitchen and feed him tuna fish and raw eggs--his favorite dish."

If the label for a group is global or vague, or if it describes a situation, then it is not treated as a mention of other persons.

"Sue is in a biology lab and she is looking through her microscope to observe what an ant would look like close up. Her class has been studying insects and she decided that she wanted to know what an ant really looked like..."

"...In the future she will receive a Nobel prize and take the money and donate to more extensive cancer research. She is truly humanitarian and now will have a chance to prove herself

to the world."

Note: In the first example, "class" is a situation and not the description of a group; this is also true for such phrases as "power to the people." In the second example, no person is mentioning awarding the "Nobel prize," and the "world" is considered far too general to refer to specific others. Consequently, these two are scored for absence of others.

Others may not be mentioned by implication or noted as missing. Thus statements that the cue character is all alone or feeling lonely do mention other persons by their absence and are not scored in this category: e.g.

"...and she's the only one there..."

"...and Carol was getting lonely..."

"...These moods often came over her, feelings of loneliness, the absence of a true friend..."

"...The partner who was to have worked with her is not here today so she is all alone..."

(N.B. In stories where the verbal or picture cue depicts more than one person, the use of this category is questionable, and should not be scored.)

Determining A Motive To Avoid Success Score

Three or four stories should be used in determining a subjects total score. There are two ways possible to obtain a final score and we have no strong evidence on the basis of which to recommend one over the other but the method used should be reported.

Categorical Scoring

The subject may receive ONLY one score per category. If imagery occurs in at least one story for a particular category, the category is scored present. Scores are not summed across stories. The final score for the subject is computed by weighting each category with the appropriate weights given in the manual. Thus scores for subjects may range from -2 to +8.

Continuous Scoring

The major difference here is that scores for each category are summed across stories. The final score is computed by weighting each category with the weights given. Thus scores may range from -2 to +8 for one story and -6 to +24 for 3 stories.

EXAMPLE Subject A

	2	2	2	1	1	-2
category	A	B	C	D	E	F
Story 1	x		x			
Story 2		x	x	x	x	x
Story 3	x		x		x	

The categorical score for this subject would be 6.

The continuous score would be 13.

IMPORTANT

Before attempting to use this system in empirical work, or reporting empirical work using this system, it is important that a scoring reliability of at least .85 be achieved.

Methods for determining scoring reliability for thematic scoring of this kind can be found in the appendix of J.W. Atkinson, Motives In Fantasy, Action, and Society.

We gratefully acknowledge the help of a number of our colleagues in various phases of this work - Jackie Fleming Hamilton, Joseph Pleck, Larry Aber, and Susan Kaplan.

SCORED EXAMPLES

- A. "The year is 1976. This is supposed to be the last sunset Linda will see, well at least according to the Bible. Actually, she is glad (2) that this will be her last day, at least she won't have to worry (2) about washing her hair tomorrow, and (2) she won't have to take that Psychology experiment. Imagine her distress (1) when she sees tomorrow's sunrise.

Scoring:

1. Non-contingent negative consequences: The negative consequences are indicated by her distress. They are caused by the world not ending, an event external to Linda, and not under her control. (+2)
2. Relief: Relief is clearly expressed by the phrase, "at least she won't have to worry..." but it could also be inferred from "she won't have to take that Psychology experiment." Her positive affect ("she is glad") is the result of the somewhat magical (Biblical predictions) alleviation of her problems. (+1)
3. Absence of mention of other persons: No persons are mentioned other than Linda, who is named in the cue. (-2)
4. Absence of instrumental activity: Linda performs no activities toward any goal. "She is glad" and "washing her hair" are descriptive of states, not activities. "Sees tomorrow's sunrise" is an event without a goal. (+1)

Total score: +2

- B. "On a nice freshly cut green lawn is Linda and Jerry sitting looking out at the sunset. Linda said to Jerry (1): It's such a beautiful sunset and Jerry said (1): You certainly are. Linda then gave Jerry a funny look (1). Linda was the type of girl who loved nature and all of its belongings. Whereas Jerry was just the opposite. No matter how hard Linda tried to convey thoughts to Jerry (1) he just wouldn't listen. Finally Linda told him (1) that they will never be happy together because they disagree (1) about practically everything (2). So, then they broke up (2).

Scoring:

1. Interpersonal engagement: The whole story is about the involvement of Linda and Jerry. The activity of watching the sunset or trying to convey thoughts are the occasions for events within the relationship. Scoring for engagement is not affected by whether the relationship is successful or not. (+2)

2. Contingent negative consequences: The deprivation occurs in the last sentence, "So, then they broke up." It is contingent because it is a direct consequence of the actions of the people in the story: "No matter how hard...he just wouldn't listen. Finally Linda told him that they will never be happy together...."

(+2)

Categories not scored:

Absence of instrumental activity: There is activity in the story: Linda gave him a look, Linda told him, toward the goal of working on the relationship and eventually terminating it.

Absence of mention of others: Jerry is a person not mentioned in the cue.

Relief: There is none -- the story ends with deprivation after a consistently downward movement.

Total score: +4

- C. "Sue had never wanted to go to college, but her parents and all of her friends had gone -- so she had no choice. In her first semester, she was required, to her despair, (1) to take a full-credit course in botany. The lectures were boring, but the labs -- 1 per week -- were unbearable. She found herself dreading (1) each Tuesday morning, because she knew that her destination would be her Botany lab; however, she was able to fool them all by looking into the microscope and seeing -- not scientific phenomena -- but her own dreams of getting out of the class."

Scoring:

1. Non-contingent negative consequences: This whole story is full of negative consequences. Non-contingency is indicated by the phrase "she was required," and tension by the phrase "to her despair." The movement of the first two-thirds of the story is from bad to worse culminating in "...the labs were unbearable. She found herself dreading..."
2. Relief: Relief is shown by the upward movement at the end of the story--"however, she was able to fool them all"--and via the nature of the alleviation (dreams in a microscope).

Categories not scored:

Interpersonal engagement: Even though there are constraining interpersonal relationships ("had no choice"), no interpersonal goal is developed. The only active constraint ("required") is made by an unnamed adversary (probably the college curriculum) and does not constitute an interpersonal engagement.

Absence of mentions of others: Others are present: "parents,"
"friends," and, later in the story, "them."

Absence of instrumental activity: Her actions around the microscope are oriented to the goal of attaining dreams. When avoidance or escape is actively pursued (e.g., "working on a plan to escape") or clearly toward a specific better place, then instrumental activity is present. If something is only being avoided, this is not instrumental activity toward a goal.

Total score: +3

SCORING EXAMPLES

Story

- 1 The day had started out all wrong for Joan. She had a fight with her mother and she had torn her new dress. Now it was 7:00 at night and Bob had not called yet. This was the night of the dinner-dance at school. She had looked forward to this night ever since Bob had asked her to go two weeks ago. Now she sat there, waiting. Finally Bob came to the door.
- 2 Joan has just answered the door and it's her brother she hasn't seen in 3 years because he's been in the service and is just arriving home from Vietnam. She throws her arms around him and he swings her around in the air. All the time she is thinking of his twin, who didn't make it back and the coming Presidential election and who she'll vote for--McGovern. The year is 1992 - I hope this is a dream.
- 3 Linda knew that she had made a horrible mistake--as a matter of fact, a number of horrible ones. She was lonely, upset, sorry to have argued, caused trouble with him. He had been so great to share things with--to take pleasure in simplicities of living. These things Linda remembered, and perhaps realized, as she sat alone looking at the setting sun. She yearned to talk with him, to settle their dispute, and to have him once again, but she knew it was futile, so she remained alone.
- 4 Carol is looking through the telescope. She is in Zoology lab. She is late. They're frantic because she forgot, and she is frantic because she forgot, until now, and she's late. She wants to speak to the professor. He casts her a bad "Stay-where-you-are" look. Is he as mean as he looks? She wonders. I've heard some awful things about him. Never tried speaking with him. Shall I tell him my problem? No, he won't understand. I want to pass this quiz. If I flunk this course, I won't graduate. O gosh! I feel sick...dizzy...I must run.
- 5 I am sitting on a nearby bench. I watch Joan come down the steps. She is smiling. She has been in the building speaking with Paul. I know she has. Paul is my fiancee. I'd have no reason to be sneaking around or spying surreptitiously if he hadn't been acting so strangely in the past few days. Joan is his old fiancée. Two years ago she up and dropped all marriage plans, severely, I could tell, injuring Paul. Why is she smiling so wryly? And why is she so dressed up and acting so confident? I feel tears on my cheek. Wait a minute. Here comes Paul now.
- 6 Barbara is in a panic to return to her chem lab because she did something earlier in the day which she now regrets. The weather and traffic are miserable and she fears she won't get there in time. When she was depressed about grades, Barbara wrote a suicide note and left it in the lab. She stole some poisonous chemicals with which to kill herself - later changed her mind. Barbara knows that, if the note is found, her parents will be notified and the school and probably her friends will also be involved. She could do anything to avoid this. Barbara is hit by a motor scooter in front of the chem building.
- 7 Carol is in an astronomy class. Her professor wants her to look through the telescope to see Mars. She failed her last exam and now has one chance to pass the course. If she can locate Mars and count the number of moons around it, naming each, then she will receive a passing grade. She is on the borderline and if she passes this one task, the professor will give her a D and will not fail her for the course. She hopes she can pass and is in great anxiety and anticipation. She will pass the course and will receive credit and make her parents and herself happy.

Story

- 8 Joan is a college student who has just discovered that she has been accepted into the Elementary Education Program. Joan goes to see her roommate to tell her about the good news. As she is walking toward her dorm, she meets a very old friend, Jim. Jim has been away from school on a trip through Europe and he has just gotten back on campus.
- 9 Linda is sitting in her bedroom looking out at the sunset. It seems relaxing to her after such a busy and hectic day. Today was Linda's first day at work and what seemed to be a very exciting job before now seems very dull and uninteresting. She's working as a secretary for a well-known law firm. In the movies it always seemed so glamorous, but now that she is there she realizes it isn't. Sitting in the window now, Linda is wondering if there isn't anything in the world which she'll ever enjoy doing.
- 10 Carol is sitting down looking through a small telescope (about 3 ft.). A young man is standing sort of behind her, kind of looking over her shoulder. He is trying to help her see something that she has never seen before - because she has never used a telescope before and because whatever it is she is looking at (maybe some detail of one of the planets) only occurs at certain times in history. Carol is at first confused because she can't make things out, then happy because she sees it.
- 11 She has just seen him. Carl came by and gave a nice "hello". She has schemed for 3 days to see him. Now it has happened. Her blood feels racey. She knew he'd be coming out of the office and through the park at noon. She wonders where he's eating but doesn't want to look as if she's following him. He was glad to see her. He knows she was. She is running to catch up with him. She gets to the outdoor cafe and stops short.
- 12 Joan unlocks her apartment door, 15 people jump up and yell "Surprise!" Her friends at work had planned a surprise birthday party. Joan is certainly surprised but happy. She has never had a party before. However, suddenly she has a heart attack from the shock. She is rushed to the hospital and in a couple of months recovered. She still is grateful for the party, however, and plans a Christmas party for those who work at the office in hopes that they will forget their guilt feelings.
- 13 Linda is sitting on a beach, now deserted. She had arrived about noon and at that time the water and sand was swarming with people. No one was around now, though; she was totally alone. The water washed up and down the sparkling sand, while the sun sank slowly amidst the purples and the yellows.
- 14 Linda is a 23-year-old woman, standing all alone in her house in a California beach. It is a calm evening and she is thinking about the people in her life--her parents, sister, and boyfriend. She is wondering in a philosophical way how things will happen--will she marry Tom?--how will it be when she is a daughter-in-law to someone else? How will her life and emotions change? She and Tom have discussed marriage but she knows that they are not ready to assume the responsibilities yet, although their love is great. She'd like her life to be settled and peaceful--the way the sunset makes her feel--but resigns herself to letting things take their own course.
- 15 Two weeks ago Judy took an exam in chemistry. Her final grade rode heavily on the exam and she was anxious about the outcome. Today in chemistry class Judy will get her exam back, in fact, the professor has just called her name. Smiling broadly, she bounded back to her seat; Judy got a "B" on her exam.

Story

- 16 Carol was walking slowly along the edge of the water. She has put on a heavy sweater and long pants, but had rolled them up to her knees. She was thinking deep thoughts and looking at the sunset. The sky was a blaze of orange, yellow and pink, with the sun's rays peeking over the edge of the clouds. It had been a beautiful day.
- 17 Judy is at a party and has had a little too much to drink. She sees the room and everyone in it as a swirling mass spinning round and round. Finally, after falling on the floor 3 times, someone put her in this chair where she is now sitting with a silly grin on her face. Soon she will either get sick or pass out of this silly drunken state. Probably tomorrow morning she won't feel too good.
- 18 Carol is in a zoology class in high school. She is surrounded by other students and the teacher who is looking over her shoulder but she feels alone. She is taking zoo because her mother insisted. Thought biology plus botany a waste. Zoo only thing left. This is second week of class. Carol wants to be a technician now. Medical work. Loves the course. Imagines self in white coat, hospital smell, clink of test tubes. Forging new medical frontiers. She'll enjoy course but next semester will be fascinated by government and decide to join foreign service.
- 19 Carol's got her new camera with her she's trying to capture the scene of the sunset on the ocean. This will win the school photography prize she hopes. But what's this! There's Doug taking the same scene she just took, and the next one, and she knows she can't win because he's a better photographer than she. What's Doug looking in his camera so astonishingly for? Oh, no! ha! he had no film.
- 20 Sue is in Biology class and has been asked to look at a paramecium slide under the microscope. She has a lab partner and each table has an instrument. She has to write what she observes down for her report which will be collected after class by her teacher who is helping the students focus their microscopes.
- 21 Linda is looking out at the sunset with her boy friend beside her. She has just come home from a supper date where her boy friend asked her to go steady. She is looking at the sunset wondering if there was ever a more perfect day. Everything seems so peaceful. Linda never wants this day to end so she is absorbing as much as possible to save for another day when things aren't so bright.

Scoring Explanations

Story 1. Non-contingent negative consequences

Though the story does not start from a positive position, there is definite movement. The day is becoming worse and worse--a feeling of tension that she may not get to go to the dance.

Contingent negative consequences

"She had a fight with her mother and she had torn her dress." Negative consequences are stated so that they are Joan's fault.

Interpersonal engagement

The overall goal of the story is one of interpersonal engagement and the actions that take place all have to do with another person.

Relief

"Finally Bob came to the door" is enough of a tension reducing statement to score relief.

Story 2. Interpersonal engagement

Joan's meeting and embracing her brother. The whole story is an interpersonal one.

Non-contingent negative consequence

"The twin who didn't make it back" is an unambiguous reference to a death caused by no one save the circumstances of fate.

Categories not scored

Instrumental activity is present in the story: "She throws her arms around him and he swings her."

Story 3. Contingent negative consequences

The negative consequence is that Linda now yearns to have him once more but will remain alone. She blames herself for having made a series of horrible mistakes and must now suffer.

Interpersonal engagement

The entire story is concerned with an interpersonal issue. Albeit negative (Sorry to have argued, caused trouble with him). Linda's thoughts center on the desire to be with her boyfriend.

Absence of instrumental activity

Although Linda "had made a horrible mistake", "was ... sorry to have argued," caused trouble. These references are descriptive and do not constitute specific action toward a goal.

Story 4. Interpersonal engagement

A major theme in the story is her concern with what kind of a person the Professor is and their relationship. There is activity in the relationship, scored even though it is negative: "He casts her a bad stay where you are look."

Contingent negative consequences

"She is frantic because she forgot." Tension as a result of the individual's own actions, which increases through the first section of the story. The terminal condition is at the end of a negative movement, leading to the extremely anxious state: "O gosh! I feel sick ... dizzy ... I must run."

Absence of instrumental activity

There are a number of verbs here which might suggest approaching a goal ('casts', 'wonders', 'heard', 'tell', 'understand'); but, these verbs are only weakly and indirectly connected with a 'doing' goal, which perhaps is "wants to speak to the professor". "Never tried speaking with him" comes the closest. All are overwhelmingly linked with a complex interpersonal relationship. For these reasons, they are not considered as present instrumental activity.

Story 5. Non-contingent negative consequences

The negative outcome is inferred from the tense anticlimax of the story ("tears on my cheek"). It is not the sufferer's fault--she is Joan's victim.

Also, "Two years ago she up and dropped all marriage plans, severely I could tell injuring Paul:" he was injured (tension and deprivation) by something she did (an external agent). Score consequences for all characters in the story--not just the main character.

Interpersonal engagement

A number of phrases: "speaking with Paul," "sneaking around or spying surreptitiously"(to deal with an interpersonal crisis), "dropped all marriage plans ... injuring Paul." Also, the narrative style of the story and its clear concern for significant others qualifies it for interpersonal engagement.

Absence of instrumental activity

For all its innuendo, there are no 'doing' actions being taken toward attaining a goal. Even the purpose of the 'spying' is unclear.

Story 6. Non-contingent negative consequences

"Barbara is hit by a motor scooter in front of the chemistry building."

Contingent negative consequences

"Barbara wrote a suicide note ... if the note is found her parents will be notified ... she could do anything to avoid this ..."

Story 7. Relief

The fact that Carol is on the verge of failing the course and is anxious about it clearly indicates tension state. She passes the test but no reference is made of any concrete efforts on her part to succeed.

Instrumental activity absent

Despite the descriptions of past events, hopes and fears, there is no clear instrumental act.

Categories not scored

Although "She failed her last exam" looks like a contingent negative consequence, it only sets the stage for the contemporary dilemma and does not in itself constitute a movement in the plot.

Story 8. Interpersonal engagement

"Joan goes to see her roommate to tell her about the good news."

Categories not scored

There is instrumental activity, "She is walking toward her dorm ..." (goal--to see roommate), so absence is not scored. There are no negative consequences, nor is there anything for which relief could be felt.

Story 9. Absence of others

Linda is mentioned in the cue. No other person is mentioned.

Relief

This occurs in the second sentence in this story: "It seems relaxing to her after such a busy and hectic day." (who statement)

Non-contingent negative consequences

"What seemed to be a very exciting job before now seems very dull and uninteresting." It is non-contingent because it is the job not any of Linda's activities that cause disappointment.

Categories not scored

There is no interpersonal engagement because there are no other people in the story. There is instrumental activity--she is working.

Story 10. Relief

No definite action on her part (or the other persons) allows her to see finally what she is looking for. It simply suddenly happens.

Categories not scored

Interpersonal engagement is not the major goal of seeing through the telescope.

Instrumental activity is present in his "trying to help" her see.

Story 11. Interpersonal engagement

The girl in the story is clearly occupied entirely with having contact with Carl. All her actions in the story have to do with meeting him and there is one instance of dialogue.

Categories not scored

Relief is not scored because all her actions were clearly thought out to bring about this meeting.

Story 12. Non-contingent negative consequences

The negative outcome is obvious in her heart attack ("suddenly she has a heart attack from the shock.") It is not her fault or in this case even the fault of the others.

Interpersonal engagement

The overall goal in the story is clearly interpersonal engagement both for Joan and the others. Giving the surprise party is one indication and Joan's planning a Christmas party for the others is a second.

Categories not scored

Instrumental activity is present in the "jumping up" and "yelling" of the people and in Joan's planning a Christmas party.

Story 13. Absence of instrumental activity

"Linda is sitting" sets the stage for the story. There is no clear goal and no activity toward anything. The water washed and the sun sank are not instrumental activities. Thus there is an absence of instrumental activity in the story.

Story 14. Interpersonal engagement

The whole thrust of the story is her relations with "the people in her life..." Also more clearly they "have discussed marriage."

Contingent negative consequences

"They are not ready." "She'd like her life to be settled and peaceful...but resigns herself..." There is tension, a wanting unfulfilled but something about the people involved (their lack of readiness) prevents its fulfillment.

Absence of instrumental activity

Though there are suggestive mental activity words--"thinking about the people," "wondering in a philosophical sort of way"--and a statement of a somewhat vague goal--"She'd like her life to be settled and peaceful"--the connection between them is not at all clear. The mental activity does not seem to contribute to the attainment of the goal and thus instrumental activity, as defined, is absent.

Story 15 Relief

Tension is created when Judy becomes anxious about the outcome of her exam. She is clearly delighted to have received a B. Although taking an exam implies some effort no explicit mention is made of any effort on Judy's part to do well either by studying hard or any other means. Therefore her delight assumes an effortless "whew" quality.

Categories not scored

Interpersonal engagement is not scored because although the professor called Judy's name the goal is clearly not interpersonal. Action does take place in the story ("prof called her name" "she bounded back to her seat") so absence of instrumental activity is not scored.

Story 16 Absence of other persons

No other characters are mentioned in the story. Remember this is a counter-indicator of fear of success.

Story 17 Contingent negative consequences

The negative outcome for Judy is that "probably tomorrow morning she won't feel too good." Remember "probably" statements are scored as if they do take place. It is her fault for drinking too much since no other person has forced the drinks on her.

Absence of instrumental activity

No really purposeful actions are taken in the story. "Someone put her in this chair" is an action but it is not specifically focused on a goal. It is on the whole a descriptive story.

Categories not scored

The goal of interpersonal engagement is not clear enough in this story to be scored.

Story 18 Categories not scored

Neither of the negative consequence categories are scored in this story. It is another form of zig-zag story going down and then coming up; she is forced to take course, but then loves it. Again no real resolution is reached. Instrumental activity is present in her "deciding" to join the foreign service.

Story 19 Non-contingent negative consequences

Doug, an external agent, taking away her chance of winning.

Contingent negative consequences

"He had no film." Score for everyone in the story. It is contingent for him since he is the agent, the link is made grammatically. If the sentence were "the camera had no film" it would be scored as non-contingent.

Story 20 None of the categories can be scored for this story. There are no negative consequences; it is not an interpersonal story but others (lab partners, teacher) are mentioned. There is no tension and no real relief. There is activity toward the goal of the task (teacher helping focus microscopes).

Story 21 Interpersonal engagement
"asked her to go steady"

Absence of instrumental activity

The "looking out," "looking at the sunset," and "wondering" are all without a goal. "Asked to go steady" is by convention scored as interpersonal engagement since the exact goal and nature of the activity are so unspecific. "Has just come home from a supper date" describes a situation, and it is more a withdrawal from a previous goal ("date") than approach to a new one.

Not scored

Negative consequences are not scored. This story ends with a sort of life-is-not-a-bowl-full-of-cherries attitude which sometimes indicates an important downward turn in the story. Here, however, the anticipation of possible future hardships is very weak and the situation where the story is left in the end is still very positive. She is using this time to help her through future encounters.

Chapter IV

ADDITIONAL RESULTS

Behavioral Correlates and Situational Determinants

In an undergraduate honors thesis carried out by Marybeth Shinn and supported partially by funds from this grant, 39 male and 52 female high school students were tested for fear of success, fear of failure, (debilitating test anxiety) and verbal task performance both before and after their single sex high schools merged to form a coed institution.

A preliminary version of the scoring system presented in Chapter 3 was used in assessing fear of success. In the first session 176 students (92 males and 84 females) were tested. In the second session which occurred 7 1/2 months later after the two schools had merged 39 males and 52 females were tested and the data to be presented reflects the performance of these latter subjects at the two times. In the first testing the subjects were in the 9th - 11th grades and in the second testing were in grades 10 - 12.

As hypothesized, girls' fear of success scores are significantly higher at the second testing than at the first and are negatively correlated with performance at time two. Although girls' time one scores do not predict performance in the single sex setting (which is interpreted to be a non-arousal condition), they are highly correlated with time two scores. Boys' fear of success scores at time one and time two are correlated neither with performance nor with each other. The hypothesis that boys' fear of failure would increase with coeducation is not supported. Test anxiety is,

however, correlated with male but not female performance at both times. Sex differences in verbal task performance with females leading at time one disappear on a highly correlated task at time two. This change is interpreted as a decrement in female performance due to increased fear of success. An alternative hypothesis that male performance improved with coeducation is also entertained.

The results described above are reflected in the following five tables:

Selected Tables from Study of Secondary School Coeducation

I. Fear of Success by Sex

	<u>Time 1</u>	<u>Time 2</u>
Males	3.12	3.94
Females	3.57	5.56

II. Fear of Failure by Sex

	<u>Time 1</u>	<u>Time 2</u>
Males	24.70	24.22
Females	23.60	25.39

III. Performance by Sex

	<u>Time 1</u> (Anagrams)	<u>Time 2</u> (Scrambled Words)
Males	35.97	34.06
Females	40.48	34.46

IV. Correlations by Sex and Time

	<u>Females</u>		<u>Males</u>	
	<u>Time 1</u>	<u>Time 2</u>	<u>Time 1</u>	<u>Time 2</u>
M _{-S} by M _{-F}	-.04	.11	-.19	-.09
M _{-S} by Perf.	-.06	-.39**	.10	-.04
M _{-F} by Perf.	-.09	-.11	-.42**	-.39*

V.

Correlations by Sex, Time 1 vs. Time 2

	<u>Females</u>	<u>Males</u>
M-S	.51***	.02
M-F	.77***	.78***
Performance	.56***	.68***

* $p < .05$
 ** $p < .01$
 *** $p < .001$

Chapter V

DISCUSSION

The most important result of this study is that an empirically derived scoring system for the motive to avoid success has been produced. This system does not depend on reaction to any one specific cue and seems to avoid most of the major problems encountered in the earlier research. It can be used with any number of cues and can be applied to a variety of neutral cues. One major caution we have for researchers is that the cues used should be restricted to or show only one person because two of the categories depend on the presence or absence of other characters. This new scoring system has been cross-validated in a sample of females who wrote TAT stories under neutral conditions and later performed in a competitive mixed sex situation similar to that in this study. The actual stories scored were written in response to different cues than those used with the New Hampshire sample. Thus we are confident that the system can be applied to a variety of cues.

We are much encouraged by the results in Shinn's thesis reported in Chapter 4 using a preliminary version of the scoring manual to observe behavioral correlates and situational determinants in a real (not laboratory) situation for both men and women subjects over a 7 1/2 month interval.

Several important theoretical and empirical questions remain to be studied using the new scoring manual. Further analysis is also needed to better understand the complexities of accurately assessing inhibitory motives as discussed in Chapter 2.

Considerable attention needs to be directed to assessing success avoidant motivation in men and groups other than white females. We are also eager to direct our attention to the results (TAT and performance) generated in the cooperative condition and to take full advantage of the data gathered on the New Hampshire sample that has yet to be completely analyzed.

References

- Atkinson, J. W. (Ed.) Motives in Fantasy, Action and Society. Princeton, N.J.: Van Nostrand, 1958.
- Atkinson, J. W., & Feather, N. T. A Theory of Achievement Motivation. New York: Wiley, 1966.
- Bardwick, J. M., Douvan, E., Horner, M. S., & Gutmann, D. Feminine Personality and Conflict. Belmont, California: Brooks/Cole Publishing, 1970.
- French, E. G., & Lesser, G. S. Some Characteristics of the Achievement Motive in Women. Journal of Abnormal and Social Psychology, 1964, 68, 119-128.
- Freud, S. New Introductory Lectures on Psychoanalysis. New York: Norton, 1965. Lecture XXXIII.
- Horner, M. S. Sex Differences in Achievement Motivation and Performance in Competitive and Non-Competitive Situations. Unpublished doctoral dissertation, University of Michigan, 1968.
- Lesser, G. S., Krawitz, R., & Packard, R. Experimental Arousal of Achievement Motivation in Adolescent Girls. Journal of Abnormal and Social Psychology, 1963, 66, 59-66.
- McClelland, D. C., Atkinson, J. W., Clark R. A., & Lowell, E. L. The Achievement Motive. New York: Appleton, 1953.
- Mead, M., Male and Female. New York: Morrow, 1949. Also New York: Dell (Laurel Ed.), 1968.
- Shinn, Marybeth. Secondary School Coeducation and the Fears of Success and Failure. Unpublished Honors Thesis, Department of Psychology and Social Relations, Harvard University, March 1973.
- Veroff, J., Wilcox, S., & Atkinson, J. W. The Achievement Motive in High School and College-Age Women. Journal of Abnormal and Social Psychology, 1953, 48, 103-119.

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APPENDICES

A. TIME I - Neutral Condition

1. TAT
2. Scrambled Words Test
3. Questionnaires

B. TIME II - Arousal Condition

1. TAT
2. Arithmetic Problems (arousal)
3. Hand Test
4. Anagram Test
5. General Information

C. TIME II - Non-Arousal Condition

1. TAT
2. Arithmetic Problems (non-arousal)
3. Hand Test
4. Anagram Test
5. General Information

D. Pre-Validation Scoring Category List

E. RAW DATA

Code for RAW Data
Data

F. TIME II - Cooperative Condition

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Appendix A

Order of Presentation
to Subjects

- | | |
|--|-----|
| 1. TAT Time I | 1st |
| 2. Lowell Scramble Words Test | 2nd |
| 3. Test of Perception of Traits
in Others and Basic Questionnaire | 3rd |

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To ensure anonymity in this experiment, we are using code numbers. As you know, there are two sessions in the experiment. Therefore for purposes of attendance at this session and for scheduling participation in the second session in early January, we will need your name (written legibly below). It will be associated with the code number above. Hereafter, the material of your test will be associated only with this number. Finally, to ensure anonymity, these sheets will be destroyed at the end of the second session.

Please write your name below. Carefully rip this first page off and pass it in. Thank you.

NAME _____

Your participation in the second session of this experiment will take place on either Tuesday, January 4 or Thursday, January 6. Please cross out the hours for each day for which it is NOT possible for you to attend.

	<u>Hours</u>				
Tuesday, Jan. 4	10,	11,	12,	1,	2
Thursday, Jan. 6	10.	11,	12,	1,	2

CUE INTERPRETATIONS TASKINSTRUCTIONS

BEST COPY AVAILABLE

You are going to see a series of verbal leads or cues, and your task is to tell a story that is suggested to you by each cue. Try to imagine what is going on in each. Then tell what the situation is, what led up to the situation, what the people are thinking and feeling, and what they will do.

In other words, write as complete a story as you can--a story with plot and characters.

You will have twenty (20) seconds to look at a verbal cue and then 4 minutes to write your story about it. Write your first impressions and work rapidly. I will keep time and tell you when it is time to finish your story and to get ready for the next cue.

There are no right or wrong stories or kinds of stories, so you may feel free to write whatever story is suggested to you when you look at a cue. Spelling, punctuation, and grammar are not important. What is important is to write out as fully and quickly as possible the story that comes into your mind as you imagine what is going on in each cue.

To help you cover all the elements of a story plot in the time allowed, you will find the following guide questions listed at the top of each story page:

What is happening? Who are the people?
What has led up to this situation? That is, what
has happened in the past?
What is being thought? What is wanted? By whom?
What will happen? What will be done?

Please note that there will be one page for writing each story, following the page on which the verbal cue is given. If you need more space for writing any story, use the reverse side of the previous page--the one on which the cue was presented. Do not turn or go on to the next page until I tell you to do so.

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CAROL IS LOOKING THROUGH THE TELESCOPE

What is happening? Who are the people?

What has led up to the situation? That is, what has happened in the past?

What is being thought and felt? What is wanted? By whom?

What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.

Do not turn page until told to do so.

JOAN SEEMS TO BE PARTICULARLY PLEASED

What is happening? Who are the people?

What has led up to the situation? That is, what has happened in the past?

What is being thought and felt? What is wanted? By whom?

What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.

Do not turn page until told to do so.

DIANE HAS JUST RECEIVED WORD THAT SHE IS ONE OF THE THREE STUDENTS
IN THE STATE TO GET A PERFECT SCORE ON THE LSAT (LAW SCHOOL
ADMISSION TEST)

What is happening? Who are the people?

What has led up to the situation? That is, what has happened in the past?

What is being thought and felt? What is wanted? By whom?

What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.

Do not turn page until told to do so.

LINDA IS LOOKING OUT AT THE SUNSET

What is happening? Who are the people?

What has led up to the situation? That is, what has happened in the past?

What is being thought and felt? What is wanted? By whom?

What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.

Do not turn page until told to do so.

BARBARA IS IN THE MIDST OF A HEATED ARGUMENT

SCRAMBLED WORDS TEST

This is a test of your facility with words. As you may know, vocabulary tests have proved to be the best single measure of general intelligence. This test measures one aspect of vocabulary.

On the following pages are a number of common words with the letters scrambled. Try to make words (no plurals or proper nouns) and write them in the blanks. If you find some words difficult, go on to the next.

Do not start until given the signal to do so, and go on to the next page when and only when you are told to. You are not expected to complete all the words.

NUDRIG

UORY

NEGRE

OLOSCH

THIGS

EKMA

RONHT

LPHE

TREN

SACEU

PNUO

LODG

LPAPE

RYEDA

COTA

PYPHA

DIBR

DRNUO

TERTEB

TROSH

HLIDC

RESTIS

DFIN

KROC

SYWALA _____

EGALR _____

ORWK _____

ORLFO _____

RELCA _____

LAMLS _____

BOLW _____

UAOTB _____

TBHO _____

ANHD _____

SOLCE _____

NOSSEA _____

NMAY _____

AMWR _____

YLER A _____

LEASEP _____

JNIO _____

TOPPA _____

RAVEH _____

HE _____

CAPEL _____

NIDM _____

NAWT _____

NUDSO _____

AMYLIF

WHSI

TAGER

HADTE

OVEM

IEKL

RAMTET

HROU

BIGNR

OCNE

REDO

LITLS

ROPWE

GNYUO

NAEOL

WOLFER

KCQIU

CARHE

WITA

EVRY

TORFN

TKEA

UJTS

TWESE

KMLI _____
KEPSA _____
MOWNA _____
NORGST _____
HINTK _____
NIPLA _____
TIWH _____
ETERST _____
RIREV _____
HECA _____
EHVA _____
NOMAG _____

NOWDIW _____
EHTN _____
IYCT _____
DARPI _____
FRAI _____
IRHC _____
YRCRA _____
NADST _____
ENOP _____
RIVDE _____
NIDHEB _____
VOEL _____

ADLG	_____
REVSE	_____
TASE	_____
HPIS	_____
LIVSER	_____
SEHUO	_____
YHTE	_____
FENTO	_____
HWNE	_____
RYTSO	_____
NUDARO	_____
HEFSR	_____

LGNO	_____
SIRTF	_____
WEHER	_____
NIGAA	_____
ADKR	_____
RIGNSP	_____
LOYN	_____
GILTH	_____
NWOKN	_____
ROME	_____
WGRO	_____
TRELTE	_____

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TEST OF PERCEPTION OF TRAITS IN OTHERS

Several of the preceding tasks have involved different aspects of perception.

The following task is a test of your perceptions of traits in others. For this part, we will ask you about your perceptions of traits in men and women. Please respond with what you think is right. Work rapidly.

TEST OF PERCEPTION OF TRAITS IN OTHERS

This is a test of your perceptions of traits in males and females. Please begin by asking for each of these questions: What is the percentage of males who have this trait? Answer by checking (✓) the percentage of males (0%, 20%, 40%, 60%, 80%, or 100%) you think has the trait in question.

Strong need for
security:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Aggressive:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Adventurous:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Gentle:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Acts as a leader:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Worldly:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Ambitious:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Talkative:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Aware of feelings
of others:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Hides emotions:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Able to separate
feelings from ideas:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

Competitive:

0%	20%	40%	60%	80%	100%
----	-----	-----	-----	-----	------

TEST OF PERCEPTION OF TRAITS IN OTHERS

This is a test of your perceptions of traits in males and females. Please begin by asking for each of these questions: What is the percentage of females who have this trait? Answer by circling (O) the percentage of females (0%, 20%, 40%, 60%, 80%, or 100%) you think has the trait in question.

Strong need for
security:

0% 20% 40% 60% 80% 100%

Aggressive:

0% 20% 40% 60% 80% 100%

Adventurous:

0% 20% 40% 60% 80% 100%

Gentle:

0% 20% 40% 60% 80% 100%

Acts as a leader:

0% 20% 40% 60% 80% 100%

Worldly:

0% 20% 40% 60% 80% 100%

Ambitious:

0% 20% 40% 60% 80% 100%

Talkative:

0% 20% 40% 60% 80% 100%

Aware of feelings
of others:

0% 20% 40% 60% 80% 100%

Hides emotions:

0% 20% 40% 60% 80% 100%

Able to separate
feelings from ideas:

0% 20% 40% 60% 80% 100%

Competitive:

0% 20% 40% 60% 80% 100%

BASIC QUESTIONNAIRE

Please fill out the following questions.

1. Age: _____ yrs.
2. Sex: male _____, female _____.
3. Height (estimate to nearest inch): _____.
4. Weight (estimate to nearest pound): _____.
5. List all your brothers & sisters according to age & indicate their sex. Include yourself in the list, & indicate yourself by circling your age & sex.
Start with the oldest.

AGE

SEX

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

6. What did your parents consider the three most important things to teach you?

- 1.
- 2.
- 3.

7. What is your father's occupation? _____.

How much education has he completed? _____.

How satisfied would you say your father is with his occupation?

very
satisfied

neutral

very
dissatisfied

If he had it to do over again, what do you think he would do?

Basic Questionnaire/con't

8. What is your mother's occupation? _____.

How much education has she completed? _____.

How satisfied would you say your mother is with her occupation?

very
satisfied

neutral

very
dissatisfied

If she had it to do over again, what do you think she would do?

9. What are your career plans? _____

_____.

10. How would you describe the person you want to marry? What are the characteristics or qualities you think are the most important to you in the person you marry?

11. What are you majoring in or what possibilities are you considering?

_____.

Appendix B
Arousal Condition

Order of Presentation
to Subjects

1. TAT Time II	3rd
2. Arithmetic Problems (Arousal)	1st
3. Hand Test	2nd
4. Anagram Test	4th
5. General Information	5th

CUE INTERPRETATIONS TASKINSTRUCTIONS

You are going to see a series of verbal leads or cues, and your task is to tell a story that is suggested to you by each cue. Try to imagine what is going on in each. Then tell what the situation is, what led up to the situation, what the people are thinking and feeling, and what they will do.

In other words, write as complete a story as you can--a story with plot and characters.

You will have twenty (20) seconds to look at a verbal cue and then 4 minutes to write your story about it. Write your first impressions and work rapidly. I will keep time and tell you when it is time to finish your story and to get ready for the next cue.

There are no right or wrong stories or kinds of stories, so you may feel free to write whatever story is suggested to you when you look at a cue. Spelling, punctuation, and grammar are not important. What is important is to write out as fully and quickly as possible the story that comes into your mind as you imagine what is going on in each cue.

To help you cover all the elements of a story plot in the time allowed, you will find the following guide questions listed at the top of each story page:

What is happening? Who are the people?
What has led up to this situation? That is, what
has happened in the past?
What is being thought? What is wanted? By whom?
What will happen? What will be done?

Please note that there will be one page for writing each story, following the page on which the verbal cue is given. If you need more space for writing any story, use the reverse side of the previous page--the one on which the cue was presented. Do not turn or go on to the next page until I tell you to do so.

SUE IS LOOKING INTO HER MICROSCOPE

What is happening? Who are the people?

What has led up to the situation? That is, what has happened in the past?

What is being thought and felt? What is wanted? By whom?

What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.

Do not turn page until told to do so.

JUDY IS SITTING IN A CHAIR WITH A SMILE ON HER FACE

What is happening? Who are the people?

What has led up to the situation? That is, what has happened in the past?

What is being thought and felt? What is wanted? By whom?

What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.

Do not turn page until told to do so.

AFTER FIRST TERM FINALS, ANN FINDS HERSELF AT THE TOP OF
HER MED SCHOOL CLASS

What is happening? Who are the people?

What has led up to the situation? That is, what has happened in the past?

What is being thought and felt? What is wanted? By whom?

What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.

Do not turn page until told to do so.

CAROL IS WALKING ALONG THE BEACH LATE IN THE DAY

What is happening? Who are the people?
What has led up to the situation? That is, what has happened in the past?
What is being thought and felt? What is wanted? By whom?
What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.
Do not turn page until told to do so.

AS THE LEADER OF A GROUP OF MEN AND WOMEN, NANCY HAS THE
FINAL SAY ON ALL DECISIONS OF THE GROUP.

What is happening? Who are the people?
What has led up to the situation? That is, what has happened in the past?
What is being thought and felt? What is wanted? By whom?
What will happen? What will be done?

Please

Use reverse side of previous page if more room is needed.
Do not turn page until told to do so.

1875

Memory and Intellectual ProductivityArithmetic Problems

This test has proven to be an excellent measure of how quickly and efficiently people can think and work.

On the next page there is a series of 2-step arithmetic problems. The problems consist of two lines of simple arithmetic. You are to solve each line separately, REMEMBER THE RESULT but DO NOT WRITE IT DOWN. If the top line is larger than the bottom, SUBTRACT the bottom from the top and write in the answer. If the top line is smaller than the bottom, ADD the two together and write in the answer.

Here is a sample and instructions for working it:

SAMPLE: $6+8-2$
 $3-1+4$

INSTRUCTIONS:

- (1) add the first line across: $6+8-2=12$. REMEMBER THE RESULT, BUT DO NOT WRITE IT DOWN
- (2) add the second line across: $3-1+4=6$. REMEMBER THE RESULT, BUT DO NOT WRITE IT DOWN
- (3) if the top line sum (12 in this example) is LARGER than the bottom line sum (6 in this example) you subtract the bottom sum from the top. If the top line sum is SMALLER, then add the two sums together. This gives you your answer. In this sample, the top line sum is 12, which is larger than the bottom line sum, 6, so you subtract 6 from 12 and write down the answer, 6. If the two lines are equal you subtract. The rule is: SUBTRACT WHEN YOU CAN SUBTRACT WITHOUT GETTING A NEGATIVE NUMBER: OTHERWISE ADD.

BEST COPY AVAILABLE

Arithmetic Problems

Here are two practice problems:

$$5-3+1$$

$$6+2-3$$

The answer is 8, since the top line sum, 3, is SMALLER than the bottom line sum, 5, and you therefore add.

$$6+7+1$$

$$8-7+9$$

The answer is 4, since the top line sum, 14, is LARGER than the bottom line sum, 10, and you therefore subtract.

On the next page there will be 100 of these problems. You will have 5 minutes to do as many as you can. Before you do these estimate below how many you think you will complete.

_____ (out of 100).

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

-1-	-2-	-3-	-4-	-5-
7+8+5=	6+4+5=	3-2=5=	5+2+8=	8-5+3=
9-4-3=	8+6+7=	9+5-3=	6+3+3=	6+3-4=
3+8-7=	9-4+8=	9-3+8=	5+1-3=	3+9-4=
5+6-2=	3+6-1=	9+3-8=	4-8+6=	5+8-4=
2+9-1=	9-4+2=	7-1-2=	7-2+8=	9+3-7=
8-4+6=	7+5+4=	6+5-6=	9+2-7=	6-6+3=
3+9-5=	9+5-6=	9+2-8=	1+5-6=	8+6-2=
7+8-6=	6-8+3=	7+5+6=	5-4+7=	6+7-8=
3+9-5=	8-6+2=	8-2+7=	2+7+6=	3-7+8=
7+4-3=	9+5+3=	5+6-2=	5+7-3=	4+1+5=
5+7-4=	7+4-7=	7+9-2=	7-5+2=	5+9-6=
8-2+9=	6+8-5=	8-3+9=	7+2-8=	8-3+9=
6-9+5=	9-4+8=	3+7-2=	9-3+8=	7-4+3=
8-3-2=	6+8-5=	2+4-1=	7+5-4=	6-4+2=
5-2+6=	1+2-1=	8+3+3=	5-6+9=	8+3-6=
9+4+3=	4+9-2=	7+6-4=	7-8+9=	4+9-6=
3+7-8=	9+3-8=	2-9+8=	7+4-5=	4+9+3=
9-6-2=	7+5-4=	7-4+2=	8-3+9=	7+5-3=
2-1+6=	8+4-9=	3+6+3=	4+9+3=	2-4+9=
9+5-8=	5+6+8=	6+5-9=	7+5-3=	3+8-2=

-1-	-2-	-3-	-4-	-5-
8+5-7=	6-9+5=	3+8+6=	5-4+9=	7+4+2=
4+9+4=	5+8-4=	6+5-3=	7-3+8=	9+3+4=
1+9-7=	8-2+9=	3+8-6=	8+4-5=	7+4-5=
4-6+5=	9+4-7=	9+5-4=	7+6-4=	4-8+5=
8-2+9=	2+7-4=	6-3+9=	8-3+9=	7-3+7=
3+8-4=	4-8+5=	9+5+4=	4+7-5=	8+3-7=
6+5-2=	9-2+8=	4+9-5=	8-2+8=	6-2+9=
8-3+8=	5+6-3=	7+6-3=	7+4-3=	6+7-8=
4+9-7=	9+3-8=	3+9-4=	9-3+8=	3+8-7=
4-2+5=	5+6-3=	5+6-2=	5+8+4=	9+3-8=
9+2-8=	3+9-5=	2+7+6=	8-2+7=	8+6-2=
7+5+4=	9+2-7=	6+7-8=	7+4-3=	5+7-3=
3+9-5=	8+6-2=	4+9+3=	8+4-9=	9-3+6=
5+6-2=	9+5+3=	8-5+4=	3+7+8=	6-5+4=
6-5+6=	8+6-2=	4+9+3=	8-9+4=	6-3+9=
9-6-2=	9+3+5=	4+8-5=	7+3+8=	6-5+4=
8+7+6=	9+5-3=	6+3+3=	4+9+3=	8+4-9=
6+4+5=	3-2+5=	5+2+8=	8-5+4=	3+7+8=
9-3+6=	6-5+2=	7-2-3=	3+4+8=	8-3+2=
6-5+4=	9-6+2=	8+9-7=	4-2+6=	9-6+4=

HANDS

520019

PLEASE DESCRIBE WHAT THE HAND IS DOING, WITH A FULL SENTENCE.

1.

2.

3.

4.

5.

6.

7.

8.

Anagram Task

This test is a measure of verbal ability.

Your task will be to make as many words as possible in the time allowed using the letters of a master word which will be presented to you.

For Example:

If the master word were WASHINGTON

possible smaller words would be: WING, AS, TIN, WAS, NON and so on.

The word NOON would not be acceptable since there is only one "o" in the master word.

At the end of a certain interval I will say "CHECK" and you are to put a check mark after the last word you have written. Then GO ON WORKING.

Do not begin until told to do so.

[illegible]

Blank lined paper for writing.

Blank lined area on the left side of the page.

Blank lined area on the right side of the page.

GENERAL INFORMATION

1. How well did you know the person with whom you are working?

Check one:

- _____ a. We are very good friends.
 _____ b. We are friends.
 _____ c. We are acquaintances.
 _____ d. We have met once or twice.
 _____ e. Not at all until today.

Check as many as are appropriate:

- _____ f. Have some classes together.
 _____ g. Live in the same dorm.
 _____ h. Are roommates.
 _____ i. Have dated each other.
 _____ j. Often get together outside of school.
 _____ k. Other (specify)_____.

2. How important was it to you to do well on the tests in this part of the experiment? (Put an X someplace on the line that best reflects your feelings.)

Not at all
 Important

Very
 Important

3. Do you think men or women usually do better on the tasks you did today?

Men _____

Women _____

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Appendix C

Non-Arousal Condition

Order of Presentation
to Subjects

- | | |
|--|-----|
| 1. TAT Time II (Same as Appendix B ¹) | 3rd |
| 2. Arithmetic Problems (Non-Arousal) | 1st |
| 3. Hand Test (Same as Appendix B ³) | 2nd |
| 4. Anagram Test (Same as Appendix B ⁴) | 4th |
| 5. General Information | 5th |

Arithmetic Problems

On the next page there is a series of 2-step arithmetic problems. The problems consist of two lines of simple arithmetic. You are to solve each line separately, REMEMBER THE RESULT but DO NOT WRITE IT DOWN. If the top line is larger than the bottom, SUBTRACT the bottom from the top and write in the answer. If the top line is smaller than the bottom, ADD the two together and write in the answer.

Here is a sample and instructions for working it:

SAMPLE: 6+8-2
 3-1+4

INSTRUCTIONS:

- (1) Add the first line across: $6+8-2=12$. REMEMBER THE RESULT, BUT DO NOT WRITE IT DOWN
- (2) Add the second line across: $3-1+4=6$. REMEMBER THE RESULT, BUT DO NOT WRITE IT DOWN
- (3) If the top line sum (12 in this example) is LARGER than the bottom line sum (6 in this example) you subtract the bottom sum from the top. If the top line sum is SMALLER, then add the two sums together. This gives you your answer. In this sample, the top line sum is 12, which is larger than the bottom line sum, 6, so you subtract 6 from 12 and write down the answer, 6. If the two lines are equal you subtract. The rule is: SUBTRACT WHEN YOU CAN SUBTRACT WITHOUT GETTING A NEGATIVE NUMBER: OTHERWISE ADD.

Arithmetic Problems

Here are two practice problems:

$$5-3+1$$

$$6+2-3$$

The answer is 8, since the top line sum, 3, is SMALLER than the bottom line sum, 5, and you therefore add.

$$6+7+1$$

$$8-7+9$$

The answer is 4, since the top line sum, 14, is LARGER than the bottom line sum, 10, and you therefore subtract.

On the next page there will be 100 of these problems. You will have 5 minutes to do as many as you can. Before you do these estimate below how many you think you will complete.

_____ (out of 100).

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

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9-4-3=	8+6+7=	9+5-3=	6+3+3=	6+3-4=
3+8-7=	9-4+8=	9-3+8=	5+1-3=	3+9-4=
5+6-2=	3+6-1=	9+3-8=	4-8+6=	5+8-4=
2+9-1=	9-4+2=	7-1-2=	7-2+8=	9+3-7=
8-4+6=	7+5+4=	6+5-6=	9+2-7=	6-6+3=
3+9-5=	9+5-6=	9+2-8=	1+5-6=	8+6-2=
7+8-6=	6-8+3=	7+5+6=	5-4+7=	6+7-8=
3+9-5=	8-6+2=	8-2+7=	2+7+6=	3-7+8=
7+4-3=	9+5+3=	5+6-2=	5+7-3=	4+1+5=
5+7-4=	7+4-7=	7+9-2=	7-5+2=	5+9-6=
8-2+9=	6+8-5=	8-3+9=	7+2-8=	8-3+9=
6-9+5=	9-4+8=	3+7-2=	9-3+8=	7-4+3=
8-3-2=	6+8-5=	2+4-1=	7+5-4=	6-4+2=
5-2+6=	1+2-1=	8+3+3=	5-6+9=	8+3-6=
9+4+3=	4+9-2=	7+6-4=	7-8+9=	4+9-6=
3+7-8=	9+3-8=	2-9+8=	7+4-5=	4+9+3=
9-6-2=	7+5-4=	7-4+2=	8-3+9=	7+5-3=
2-1+6=	8+4-9=	3+6+3=	4+9+3=	2-4+9=
9+5-8=	5+6+8=	6+5-9=	7+5-3=	3+8-2=

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-1-	-2-	-3-	-4-	-5-
8+5-7=	6-9+5=	3+8-4=	5-4+9=	7+4+2=
4+9+4=	5+8-4=	6+5-3=	7-3+8=	9+3+4=
1+9-7=	8-2+9=	3+8-4=	8+4-5=	7+4-5=
4-6+5=	9+4-7=	9+5-3=	7+6-4=	4-8+5=
8-2+9=	2+7-4=	6-3+9=	8-3+9=	7-3+7=
3+8-4=	4-8+5=	9+5-3=	4+7-5=	8+3-7=
6+5-2=	9-2+8=	4+9-3=	8-2+8=	6-2+9=
8-3+8=	5+6-3=	7+6-3=	7+4-3=	6+7-8=
4+9-7=	9+3-8=	3+9-4=	9-3+8=	3+8-7=
4-2+5=	5+6-3=	5+6-2=	5+8+4=	9+3-8=
9+2-8=	3+9-5=	2+7+6=	8-2+7=	8+6-2=
7+5+4=	9+2-7=	6+7-8=	7+4-3=	5+7-3=
3+9-5=	8+6-2=	4+9+3=	8+4-9=	9-3+6=
5+6-2=	9+5+3=	8-5+4=	3+7+8=	6-5+4=
6-5+6=	8+6-2=	4+9+3=	8-9+4=	6-3+9=
9-6-2=	9+3+5=	4+8-5=	7+3+8=	6-5+4=
8+7+6=	9+5-3=	6+3+3=	4+9+3=	8+4-9=
6+4+5=	3-2+5=	5+2+8=	8-5+4=	3+7+8=
9-3+6=	6-5+2=	7-2-3=	3+4+8=	8-3+2=
6-5+4=	9-6+2=	8+9-7=	4-2+6=	9-6+4=

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GENERAL INFORMATION

1. How important was it to you to do well on the tests in this part of the experiment? (Put an X someplace on the line that best reflects your feelings.)

Not at all
Important

Very
Important

2. Do you think men or women usually do better on the tasks you did today?

Men _____

Women _____

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Appendix D

Pre-Validation Scoring Categories for Success Avoidance

Pre-Validation Scoring Categories for Success Avoidance**

(Actual scoring categories are underlined. Single asterisks indicate categories we feel are indicative of "success avoidance." Examples are from TAT stories by females though the categories were created for males and females.)

- I. Instrumental Activity: Any overt or mental activity by one or more characters in the story indicating that something is being done about attaining a goal. Great care must be taken not to make inferences of actions from described end-states. Also, instrumental activity is not to be confused with the mere presence of verbs. For example, the statement, "She* made a contribution to the world," would not be scored because only the effect of the person's actions have been described and not the goal toward which the person is striving. The verb "made" is insufficient since it is not stated what is being made, or what the making of it entails. On the other hand, "She was working on her project, which would be a contribution to the world," would be scored since the actual activity is explicit in the story. In addition, the statement "She was thinking about the solution to the problem, which would make a contribution to the world" would be scored as instrumental mental activity toward the goal of solving the problem, regardless of what effect that solution might have on the world or anyone else.

A. Present

1. Toward any goal: Goals may be stated or inferred as follows:

a. Achievement goal

Example:

Four years of your life doing hard work, trying to get to this (L012) end with good grades to get into Law school.

b. Power goal

Example:

She wants him to give her the keys to the car but he won't. She swears "bastard" at him and he hits her--hard, across the (A072) face.

Note: The goal (obtain keys) and the action toward it (swears "bastard") are clear in this story. Caution must be taken that this is not the same as power motivation scoring, which is often gauged by the effects on others; thus, in the present system, the statement "Just the fact that she knows she finally put him down, set him in his place," merely describes the effect of an action (perhaps the goal) on another. Since it does not describe the action taken, it is not scored as instrumental activity.

c. Interpersonal (primarily affiliative) goal

Examples:

Joan is a college student who has just discovered that she (P063) has just been accepted into the elementary-ed program. Joan goes to see her roommate to tell her about the good news.

**Based on data collected on a college population in Dec. 1971 and Jan. 1972. This should not be construed as a final or validated scoring system in any way.

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Last night Jim came by to see Joan and they were out till (P056) quite late into the night.... I asked Joan what was she so happy about and then she showed me her finger and there was an engagement ring.

Diane couldn't wait to break the good news to her parents. She (L077) hurried off to the nearest pay phone to call.

- d. Other: any goal unspecified above. Include action which serves a coping function for the main character.

Example:

Carol has had many problems lately, so since she likes the beach (B033) so much, she decided to go down and take a walk along it one late day. She thought about all her problems.

2. Away from goal*: Activity which leads to avoidance of a stated or easily inferred goal.

Examples:

...Fool them by looking into the microscope and seeing--not (M052) the scientific phenomenon--but her own dreams of getting out of the class.

She thinks of the tedious routine job she has. Suddenly she jumps into her car, goes home to pack and collect her surfboard, and (B104) starts a long journey to the Florida coast.

"I can scratch this experiment and any grade I'd be getting in (M080) Bio this semester." Time was up and Sue walked out.

- B. Absent*: No statement of an instrumental act (or thinking about an act) toward attaining a goal within the story. Also scored when the only instrumental act is in the first phrase in the story and is essentially a restatement of the cue material. Commonly a story that is a description of a state of 'being' (vs. the 'doing' of instrumental activity).

Examples:

In the matter of an instant the bare branches of the trees were (S031) transformed from their stark presence into a multitude of tiny veins endlessly reaching toward the vibrance of the hues which were above them. The rich warm colors of the sun provided a feeling of pulsating life for Linda as she lay beneath the trees gazing into the sunset. It would seem that climbing these massive branches should deliver her into the warmth of the sun yet she knew that even the uppermost reaches of the tallest tree could not serve to make her one with heaven.

Note: The subjunctive tense ("would seem...should") does not qualify as the description of overt or mental activity. The following two examples have instrumental activity in the first phrase which is merely a repetition of the cue: the rest of each of the stories does not contain instrumental activity so they are scored for absence. Also, in the first example following, aimless thinking (daydreaming, "wondering" does not qualify as mental activity to attain a goal. In the second example, the action exists without reference to any goal--it is even unclear if the action ("has just come back from a visit") is away from the assistant principal's office, so it cannot be scored in the 'away from goal' category.

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[Cue: Sue is looking into her microscope]

Sue is looking into her microscope, wondering how those tiny cells (M022) and bits ever came into being, a conglomeration as they are now. The tiny specks never show up in real life and Sue feels it is shameful because they are the basis of life. Sue is now glad that she took this lab biology course for without it she would have never known the underlying secrets of life. She finds it amazing that one can see through living material but that man himself can't see through man.

Sue is looking through her microscope in the chemistry lab. She (M043) isn't really working though. School is becoming very difficult for her and she has just come back from a visit with the assistant principal and is quite upset. The teacher in this class is very hard and Sue is so far behind in her work she feels the situation is hopeless. Also, her boyfriend has this class with her and he tends to be a brilliant student which makes matters even worse.

II. Affect: Any statement of or pertaining to emotions expressed in the story. *This must often be inferred from the context of the entire story*

A. Present

1. Evaluative dimension: assessment of the emotional disposition of the characters in the story or of the tone of the story.

- a. Positive: include non-negative state of affect

Example:

Diane really felt good after this.

(L056)

- b. Negative

- 1.) Anxiety*: any emotion that is reaction to danger; present or anticipated such as anger, fear, nervous confusion.

Also, score when anxiety is explicitly denied.

Examples:

Joan's paper finally reached her, she was afraid to turn (P012) it over.

What if she cannot meet the standards that the score has (L022) placed her in?

-) Depression*: any emotion that is an expression of or reaction to powerlessness and/or guilt, present or anticipated--e.g., helplessness, fundamental disorientation, etc. Also score when explicitly denied.

Examples:

Why am I here? Why was I born? How can I serve a useful (SS022) purpose in life?

But he's gone, a mistake of her own, just as she feels (S022) her own life is but one complete mistake.

The sunset should make Linda feel calm, but unfortunately (S022) her depression grows.

Depression is also scored when it is denied:

Carol is not unhappy-not depressed, but sad in the way (B059) that almost makes you happy to feel that way..., so she cries some silent tears almost joyfully.

(Note: In some cases, both anxiety and depression can be scored, but not fr. a single statement in the story.)

Appropriateness

Appropriate: Affect as implied or stated appears normal and fits well with story. Includes all non-inappropriate stories.

Inappropriate

Out-of-place*: lack of aptness or fit, not quite right.

Example:

They sat and rapped about a lot of stuff. When he left, she retrieved his cigarette butt out of the ash tray.

Overelaborated*: extreme statement or extreme amount of otherwise appropriate affect in the response.

Examples:

...almost hysterical... (L081)

Flinging out her arms she screamed with joy. This was it. (L053)

Diane is going completely nuts...amazing! fantastic! (L022)

...the mailman had become for her the Messiah. She knew (P031) as he handed her the lightweight letter that her happiness was born again only to await the next call and promise of a future meeting.

Note: As the last example makes clear, often inferences must be made about the quality of affect from powerful words (e.g., "Messiah").

(Note: In some cases, both out-of-place and overelaborated can be scored, for not less than two separate statements in the same story.)

- B. Absent*: where no emotion is expressed; or where affect or tone are bland, dead, or flat.

Example:

Carol is looking at a telescope from Pilgrim's Monument toward the (T090) tip of the Cape in Provincetown. She sees a group of young people gathered on the beach on a cold, clear day. The group is sitting around a bonfire singing pop songs led by a guitarist named Gary. The group is practicing for their regular performances all around the area. It is called the Young Folk and several of the

III. Interpersonal relations: mention in the story of any characters other than the main character.

A. Present

1. Evaluative dimension

- a. Simple present: mere mention of other, unelaborated by positive or negative affect.

Example:

She and her friend Kathy are looking for one particular (T103) star that Mike, a friend of Kathy, had said twinkled blue, red, and white, and they wanted to see for themselves.

b. Positive

- 1.) Interpersonal positive: a positive interaction or an interaction that has positive ~~interaction~~

Examples:

It was Tuesday afternoon, and he called simply to express (P036) his feelings for her. Joan feels her love increase, and misses him more.

They usually are interested in such phenomena as a hobby. (T042)
They have feelings of anticipation and pleasure.

His coach runs out to congratulate him! (P081)

Linda and Mike decided to go on a picnic. It was a beautiful Saturday, and the weather was great. They decided to go to their favorite spot, above the river, overlooking the large farm. (S063)

- 2) External support: mention of any helpful actions or attitudes taken by another. Explicit positive evaluation is unnecessary.

Examples:

Carol is having some difficulty doing this so she asks her instructor for assistance. Mr. Davis is very willing and eager to help all his students. (T077)

She is pleased to note the grade and comment by the professor. Thus this will encourage her to keep on writing poetry more eagerly than before. (P042)

~~She is pleased to note the grade and comment by the professor.~~

c. Negative

- 1) Interpersonal negative: a negative interaction or interaction with negative consequences—e.g., fear, frustration, feelings of dissatisfaction.

Examples:

She wants to speak to the professor. He casts her a bad stay-where-you-are look. (T096)

Connie is quite uncomfortable because Linda is very strange. She sits there looking around or singing very-much off-key with the radio. (S103)

- 2) External press: any external force or pressure experienced by a character as constraining, forcing or directing attitudes or behavior. Stated awareness of this effect is unnecessary.

Examples:

She had never wanted to go to college, but her parents and all her friends had gone - so she had no choice. (M052)

Her father, having never gained a son, decided to make Anne into all the visions he had wished for his son. (M0672)

Carol's father had always been interested in astronomy and consequently he was always urging her to share his interests. (T052)

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- 3) Manipulation*: action by a character in the story which shows a desire to alter another's behavior. This intent is either stated or imputed. Ranges from forced compliance to guilt induction. *Priming can be included if it is clear that this is "in order to" get a certain action*

action or affective response.

Intends to:

Examples:

Diane will marry him and never work a day in her life. (L103)
She will however make her husband pay all her bills, that had been building up from her college education.

The senior prom is next week and Joan has been hoping Rich would invite her. An acquaintance mentioned yesterday that she was going to the prom with Rich. Joan was greatly hurt and displeased. The acquaintance, Jill, was not very pretty, or even friendly, and had known Rich for only a week or so. This morning Tim invited Jill to the prom, also. And she consequently broke her date with Rich. Rich then invited Joan and explained he hadn't really wanted to invite Jill but she had put him in an awkward position.

Note: In the last example, the only clear statement of manipulation is in the last sentence, though the context of the rest of the story is important for deciding that this is indeed manipulation.

- 4) Hostility*: moving against another in thoughts and actions; actions towards others with negative intent.

Examples:

I just poisoned your tea...

(SM046)

Just the fact she knows she finally put him down, at long last set him in his place. (SM000)

The boys see her spying on them and throw a snowball at her that breaks her telescope and that makes Carol even angrier. (T000)

(Note: In some cases, both manipulation and hostility can be scored. The example below shows both hostility (murdered him) and manipulation ("so that...") in the same sentence.)

Example:

She murdered him that night so that he would not turn her in retaliation that would probably occur if she told him to get lost.

2. Significant others: score all that are referred to:

- a. Father
- b. Mother
- c. Same-sex sibling
- d. Other-sex sibling
- e. Boyfriend/girlfriend
- f. Peers
- g. Others — Groups — *any group part.*
- h. *Other person*

B. Absent

1. Simple absent*: no other character is mentioned.

Example:

Carol has had many problems lately, so since she likes the beach (B033) so much, she decided to go down and take a walk along it one late day. She thought about all her problems, and the rush of the water and the quietness of the day made her feel better even though she had no solutions.

The beach always did quiet her down. So calm she strolled along and thought not about her problems anymore, but how beautiful the beach was.

2. Missing*: absence or lack of relationship to others mentioned,

including feelings of loneliness, *and it's possible to have partner.*

Examples:

...and she's the only one there.

(B067)

...and Carol was getting lonely.

(B020)

These moods often came over her, feelings of loneliness, the (B022) absence of a true friend...

The partner who was to have worked with her is not here today (M098) so she is all alone.

IV. Plot: characteristics of the structure of the story

A. Time perspective

1. Prolonged: past, present, and future--i.e., following the directions of the TAT or TAT-type task.

Example:

Joan just got an English paper back from her professor. She (P042) had put a lot of time and effort into this work because she felt it was very personal and it included poetry. She is pleased to note the grade and the comments by her professor. Thus this will encourage her to keep on writing poetry more eagerly than before.

2. Parts missing

a. Present only*

Example:

Carol is a member of a surveying class whose assignment is (T081) to plot the position of the north star at 11:30 p.m. She is working in a small group and there are other groups around her, each with their own telescope and other instruments. It isn't too cold and for the characters, mainly boys since surveying is a sort of masculine subject, and she and others are wearing light jackets.

- b. Other: present and future only, past and present only, past and future only.

B. Movements in story

1. Termination in enhancement ("→E")

- a. Pleasure: movement in the story ending in enhancement without the prior presence of tension. (Without movement, score as positive affect.)

Example:

Joan seems to be particularly pleased. Everything has been (P020) going right for her lately. She just graduated from high school and is looking forward to college next fall. Her boyfriend, Paul, has just given her a diamond and they will be married in a year.

- b. Relief: relative deprivation or tension state which is alleviated.

There is a relative deprivation state in which an individual is relatively deprived.

Examples:

It had been so long that Judy was sick that she became discouraged, pale, and thin. She bore the pain daily, but she occasionally broke down to tears when the pain intensified. Suddenly she walked into our room and sat down in a chair, smiling. "It's gone," she said. "The pain is gone, and I'm healthy again!"

(return related to enhancement in an enhancement story)

Also P.S. but not in relief

The story is a statement of: Things get better + better.

And sometimes suddenly ~~and~~ miraculously

(34052)

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The tests were passed back to all in the Chemistry class. (P012) Joan's paper finally reached her, she was afraid to turn it over, she thought to herself and wondered if she had studied enough. Joan finally got the courage and she turned her paper over. To her amazement, she had gotten an A- on the exam. Answers she thought were all wrong turned out to be right and partial credit was given wherever possible.

Note: Some stories seem to end in a symbolic "whew." or to have the quality of a great breakthrough or burden lifted.

Examples:

Thinking that she had positively flunked her exam Joan began to wonder about her overall average for the semester. This only caused to depress her even more. As her next Chem class brought her exam grade, she was pleased, shocked, surprised to have received a B.

Joan is married to Jean and for many years they've been trying to have children. Well today she just returned from the doctors and found out that she was pregnant. She feels beautiful sensations as she and her husband have longed for a baby ever since they were married.

In 9 months Jean and Joan will bring a baby boy into the world!

- c. Positive striving: movement in the story ending in enhancement because of effort on the part of the main character.

Examples:

Diane has paid for her own education and therefore the thrill (L090) of having made it all by herself has come to a climax. She has come a long way from the little Windsor High School and has proven a lot to others as well as herself. She will probably get a good job and support herself as long as she needs as well as pay back the loans she has taken out for her education.

Joan had been having trouble with chemistry all semester long, (P079) but on this particular test she had studied for a long time and had attended tutorial sessions, and all this work paid off. She did well on the test and was no longer in danger of flunking for the semester.

2. ~~Termination~~ *is* Deprivation ("→D") — *Disaster moment in story*

- a. Contingent disaster*: negative consequences linked explicitly to something about the main character (e.g., personal characteristics, actions, etc.). Again, there must be movement in the story.

Examples:

(MSmD37)

Joan has just got her marks in the mail. Her roommate and she are the only ones in the room. Joan has been studying hard lately to become a doctor. Joan is elated, and now feels superior to her other classmates. Her roommate tells her not to let it go to her head; Joan doesn't listen. Now she doesn't study much anymore. The next semester Joan flunked out of med school. A month later she killed herself.

- b. Non-contingent disaster*: The ^{often} ~~sudden~~ creation of tension or deprivation, not related to something about the main character (e.g., an impingement by external forces, an accident).

Example:

Sue is looking into her microscope when someone bumps her. (M080)
Why is it, she thought, everytime I try to do an experiment something goes wrong, someone bumps me causing me to break a plate.

Note: The movement takes place within the first sentence; ~~the~~ the second sentence substantiates the disastrous consequences of being bumped.

Example:

She meets a soldier who steals her heart and they have lots of (B103)
fun but in the end the husband finds out and won't let Carol see this soldier anymore so he kills himself.

Note: The disaster here is not explicitly related to any of the main characters' actions; the external impingement is the act of the husband.

C. Style problems

1. Displacement*: attribution of central action in the story to another person different from the author.

Examples:

I have just finished having my first term finals in medical school. (MS05)
I came in 20th place, but my best friend, Anne, is right at the top.

Finally I asked Joan what she was so happy about and then she (P056)
showed me her finger and there was an engagement ring.

2. Cue distortion*: evidence of misreading cue:

Examples:

(Cue: Diane has just received word that she is one of the three students in the state to get a perfect score on the LSAT (Law School Admissions Test))

Diane is very excited. Third highest in the state on the law exam. (L096)

(Cue: Sue is looking into her microscope.)

Sue is trying to find Saturn for her astronomy class next day. (M061)

3. Change*: sudden change in the direction of the plot, often signalled by "however..."

Examples:

Diane has just got the highest score on the Law Admissions test (L103) which she had been studying for her entire four years of college. She's extremely happy about it and is thinking of going to Wake Forest Law School. however her boyfriend is not so happy. He will get out of the Air Force the same time as she gets out of college and he wants to get married. Diane will marry him and never work a day in her life. She will however make her husband pay all her bills that had been building up for her college education.

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Carol is looking through the telescope. The people involved are (T0015) Carol and a friend. They have just climbed to the top of a high hill in a state park and they're looking out over the area. Carol is thinking about how beautiful everything is and how interesting it is to see all the detail visible in the trees, flowers. Carol's friend is waiting for her chance at the microscope but Carol doesn't want to give it up. Soon Carol's friend will become impatient and maybe even angry because they had to put some money in the telescope and the time may run out before Carol's through and they have no more money.

4. Inappropriate story*: inappropriate response to cue, though perhaps a meaningful and normal story on its own. *Story as whole*

Example: *Flight from cue*

Sue is looking at the slide of a bedbug. It reminds her of a (M090) dirty motel room she stayed in when she went to Ocean City, Maryland one summer with her family. There were two double beds for five people in a room smaller than her bedroom. But it was a last resort--there were no other vacancies. The worst thing was the bugs crawling on the floor and up the stairs. Her father had told her that whatever she did, not to go barefoot or the bugs would bite her.

5. Bizarre story*: strange plot, weird relationships, nonsensical progression, far-out fantasy--judged in the story as a whole.

Example:

Carol is looking through the telescope, she is gazing at the moon (T104) and is waiting to see an immense explosion. Carol's subversive relatives have previously built a gigantic guided missile that they launched light years beforehand that is predicted to blow up a major section of the moon. Any minute, Carol is eager, suddenly she becomes frantic and

0. Subjective judgment of "Success Avoidance" Imagery

Is there something in this story which indicates some obstruction to competent application of performance potential for the writer (under the assumption of the projective hypothesis)?

- 1 - Yes - High
- 2 - Yes - Low
- 3 - No

(Score other categories no matter what the score is here.)

Outline

I. Instrumental activity

A. Present

1. Toward any goal
 - a. Achievement goal
 - b. Power goal
 - c. Interpersonal (affiliative) goal
 - d. Other
2. Away from goal*

B. Absent*

II. Affect

A. Present

1. Evaluative dimension
 - a. Positive
 - b. Negative
 - 1.) Anxiety*
 - 2.) Depression*
2. Appropriateness
 - a. Appropriate
 - b. Inappropriate
 - 1.) Out-of-place*
 - 2.) Overelaborated*

B. Absent*

III. Interpersonal relations

A. Present

1. Evaluative dimension
 - a. Simple present
 - b. Positive
 - 1.) Interpersonal positive
 - 2.) External support
 - c. Negative
 - 1.) Interpersonal negative*
 - 2.) External press*
 - 3.) Manipulation*
 - 4.) Hostility*
2. Significant others
 - a. Father
 - b. Mother
 - c. Same-sex sibling
 - d. Other-sex sibling
 - e. Boyfriend/girlfriend
 - f. Peers
 - g. Others

B. Absent

1. Simple absent*
2. Missing*

IV. Plot

A. Time perspective

1. Prolonged
2. Parts missing
 - a. Present only*
 - b. Other

B. Movements in story

1. Termination in enhancement
 - a. Pleasure
 - b. Relief*
 - c. Positive striving
2. Termination in deprivation
 - a. Contingent disaster*
 - b. Non-contingent disaster*

C. Style problems

1. Displacement
2. Cue distortion
3. Change*
4. Inappropriate story*
5. Bizarre story*

O. Subjective judgement of
"success avoidance" imagery

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STORY
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RE: ~~"NEW"~~ sheets
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3-interper
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Others

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Rel. pos. d. s. c.

Dis. Rec.

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Comments

[illegible]

RAW DATA

CODE FOR RAW DATA

COLUMN 1	Condition	1 = Arousal 2 = Non arousal 3 = Cooperative
COLUMN 2	Sex	1,3,5 = Male 2,4,6 = Female
	TAT Condition	1,2,3,4 = TAT at Time I 5,6 = No TAT at Time I
COLUMNS 2-5	Subject Identification Number	
COLUMNS 6-29	Test of Perception of Traits of Others	
COLUMNS 30-32	Scrambled Words Test Score	
COLUMNS 33-34	Anagram 5 minutes Score	
COLUMNS 36-37	Anagram Last 3 minutes Score	

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AROUSAL CONDITION MALES

FORM 4413

Assign 5

11093343321333425511410242111	3708	07
15017334221322223412312133131	1614	03
15036433233312444422323234342	2117	05
11012243111211414413423223322	1418	05
11036322211323423311421224314	2118	10
15004443232343533421422245422	2219	07
11096344422433445434433354235	2520	11
11099243322422424433322333423	3321	06
11040242211233433411412123032	3921	11
11095423421333434311423454544	4521	09
15042244212333324413422443333	3521	07
11029133112323144321332323132	3723	08
11086131212301024412403244121	2425	12
11015234211223211412411343013	4425	06
11028433323332424422323333332	4425	08
15028233222433344423422433444	1725	07
15038321211334314422421344113	4225	10
15035323244344333423413344332	2426	05
11041431411333433412311243222	3927	08
11060543212342323532212332123	4127	08
15045332312334334431411334333	3327	08
11003432143342455542423444013	3428	08
11017234342343543421312344233	4128	08
11087343412233424442424245323	4228	10
11025134233423444412432343223	4428	09
11048433213533415412222454524	4528	12
11039223312214322312312124321	3229	11
11007533442334443523321434334	4730	12
11052431221223133421321423123	4031	06
11043232312233433423322243123	5031	08
11005134222121213311411234213	5132	07
11053423433432234433423344434	4633	09
15037244043311054312512243421	2233	04
15015332312323433431312334332	5333	15
11004444333423445432411234444	3735	11
11010232213332415422411243131	4138	08
11059343321324434411411434232	4538	09
15041443321334134432321334134	4543	11

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AROUSAL CONDITION FEMALES

1	12063433232432424521421245135	4620	09
2	16029432332333424312422444223	2922	06
3	16019343132222324412323342332	3322	11
4	12052144222333415434422234324	6123	08
5	12077	3124	03
6	16034343421434233433432334133	3024	04
7	16018423322222433412422334242	3124	09
8	12053343211222424333432443324	3625	09
9	12012443342433524533432345433	4027	07
10	12043444343332444422412233322	5327	08
11	12079143323242435433324244325	4029	10
12	12042432333444333522433445443	5829	11
13	1602033332323443433423444112	3729	04
14	12046343233411144421312143111	2830	08
15	12020443232242423423433444244	3530	09
16	12003423311343413414412444223	4630	11
17	12101442132331324433322343123	4630	04
18	1209023212222233322311233223	4231	08
19	12015343344423544533543345133	4831	06
20	12041342223333213421324243113	2332	12
21	1210344321232322422413344435	3232	05
22	1202223432232322422313244232	6332	10
23	12072354243323345533424444133	8732	07
24	12105134122322434422322244112	3633	05
25	12056132142451234521411244112	3034	07
26	12049432333224444434432444335	3634	04
27	12075334223212224423422343323	5234	09
28	12036233232333224322432343212	5334	08
29	12098421223223423421323322324	8336	11
30	12031243322322433423423334112	10136	12
31	16001533241321445511411345115	7336	13
32	12096442123222434413432454343	7937	07
33	12104233332242423222423334122	3138	08
34	12081223221233333422421333332	5838	18
35	16030433311433214422412443213	4938	08
36	12059432233332334423423332323	5539	11
37	16023332342422445421432244022	4739	11
38	12048145232434244532532154545	8140	14
39	12067333412423443523533355143	7142	10

FORM 6413

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NON-AROUSAL CONDITION MALES

21104433421234434422412244111	6012	14
21085343213332223212413343223	2513	06
21001144243322424421413344113	2115	07
21056144345322433434524455122	2515	09
25014221112343324413413324222	0915	05
25044323222232313422411343111	1615	08
25016441221322331422322333233	1317	04
25040443211333424413412254412	2919	05
21038534332333435513412444134	2020	07
21046321211112433411311223121	2220	13
21102113312433543212313433434	2520	05
21042123331223132412421235111	2821	07
25032343332422444522423344003	3221	06
21091224212323423313312234232	2222	08
21103444221222435444431444533	2522	12
21013244342543335522431244133	3823	09
25039144212323334422423444141	3223	11
2109234332221324422412444334	2824	08
21062112342242144412423345043	3024	15
21070443222123134432412233135	3824	08
21068232211121315511421343412	2425	06
21063232111132212421311243311	3225	03
21050344234435413422432244212	3325	08
25002423321233524411312334524	2325	11
21057244313112124411411335232	3826	07
21071323334343444423432434114	1627	09
21055134233422334422423344233	3027	04
21030332211222323312412234121	4828	05
21027344433334434212544345433	5128	03
21088444133324434513423455113	2729	04
25034232321122223432431444444	4029	05
25033333224322443434423344323	5929	04
21035424212232222321311243222	3630	08
21044433311434453422431534353	4030	06
21097544232333524523434344233	3331	05
21090143112422424411412223423	3931	09
21067443212343445412422344123	5932	17
250313343333322333322333223	3732	08
25003544242314434522423323342	2934	09
25030332112332424412411334234	5235	09
21080133212212444313411454122	5838	12
21011234343322344422422143111	4940	07
21101233121221434313311233224	5840	09

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NON-AROUSAL CONDITION FEMALES

26025344244343444412422444122	2316	08
22006112233442244333-23434344	1719	05
→ 22005422332223443412322233122	2220	03
26002233222223432321411333122	2020	06
26003332214121514422225441315	3821	08
? → 22078543242324334533423334122	3022	08
22058332321233234432321123131	4722	10
26028344332333445224422223011	3922	13
22068234222312334423422444134	2623	09
→ 22094334422333323433323343223	4024	04
22037443232221424422444434112	5324	05
2602444423233324432223352122	2924	08
→ 22092233322333224343322343114	3325	04
22089332322343423323424324223	4026	02
26026233211334323312413224232	5526	14
→ 22080243332333443423322234133	2528	04
→ 22061133233422443223333434124	4529	04
22051432332323413321432353123	5429	06
→ 22007344322422234412412244132	5929	11
→ 22062441231323425511434232225	2930	12
22026134333423424422432334241	3230	09
→ 22008233211243124311311142011	4030	07
26004322211133212421211142111	2330	11
→ 22073453343433344522521344121	2633	07
22035334224221134414442443231	6133	09
2603253323232342443233244323	5034	10
→ 22027534434424444543423444113	7635	12
26035432211322433432411333223	3535	11
26036442121312424412422323213	3935	09
→ 22030344332433425432432344424	4236	05
22102342221222343511411344012	3737	06
→ 22002344234321224423414333233	4337	10
22057342321333323422422343124	4838	09
22087343241422333422422343533	4639	05
→ 22013454143423424544433354143	6539	17
? → 22028344213321335522413243122	6740	07
22040233322332434423322243222	6940	08
26033241211432235321422343115	4940	12
22086332234434234432333434343	5541	11
26027442144322223422423243134	8348	16

FORM 6413

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COOPERATIVE CONDITION MALES

31021444232423534523423344235	2408	04
31065454443333444522422444113	3415	06
31026234322223424421312232322	2718	11
31064053232333533511513354001	1019	05
31024234221222113422421234112	3120	06
31100433433343524434443444234	3120	09
31105443323323333433422242322	2521	06
31008323252235324422422334333	3622	04
31023242312343234411311443223	4123	09
31022133411333234323411351414	2824	07
31069142131132125411343253112	3124	08
31014433433333334423423244122	4624	08
31098443111232414422411333214	2725	07
31072433243423235423433445334	3026	08
3101845 311433305355331533205	4526	10
31032343221323234522422344133	2928	05
31034442211323424412421343123	5528	13
31089144442434134432421344233	3529	10
31058332112341414212101123311	6633	17
31031155411512221222214341113	8733	12
31049353344221415443422451005	3134	12
31094233211334434412311334223	5336	10
31084443211212324411412243222	4638	12
31009543212233424533312233423	7438	11

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COOPERATIVE CONDITION FEMALES

3201733333332323422423243222 4218 06
32099344244322434424433344144 3219 08
32001442122132423423323323232 3323 10
32060344344423444433432434134 3524 05
32093433234221424413311232224 3724 10
32069432342231413343234444123 2025 07
32032144344323344423522445144 4025 04
32029334433333424424433334233 2326 05
32023144211331114423321442132 3126 12
32034253242222223433323234243 3526 08
32039432311322543521413244543 4727 07
32070123212223444212311134232 2429 04
32082344333334435443423443135 5029 07
32076112331313424212421342113 3730 07
32055453233434445423434454324 4130 08
32033244443332444433432444224 3531 10
32091245233423444323323444243 3931 03
32088423432425534423433245443 4231 12
32083233244431544522422234223 6131 09
32100244122322324412312334213 2934 05
32066434322233344413222344114 8435 18
32074133244443435522422344123 5136 09
32085433234435434423324434332 6936 08
32009234323432223422422244324 7539 16
32097245334442435412334344124 4441 06
32011423323324343423322344233 7541 06

FORM 6413 5

Appendix F

Cooperative Condition

1. Verbal instruction for cooperative condition
2. Task of Perceptual Acuity: Imbedded Words
3. TAT Time II (Same as Appendix B1.)
4. Verbal instruction for cooperative anagram
5. Anagram task (Cooperative condition)
6. General Information (Same as Appendix B5.)

COOP

1 PM

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Cooperative: lead-off

As is obvious, for this part of the study you have been paired with someone else. We have found elsewhere that team effort leads to greater productivity and efficiency in solving problems. You have been paired because we are interested in seeing just how much more effective people are when working together as a team on a task.

~~Let's turn to the first task: Imbedded Words. The top booklet in only one of your folders is the Imbedded Words Task.~~

There are many different ways of cooperating. One of these ways is to work together on a problem with many answers, where the team effort makes a higher joint score. Let's turn to the first task: Perceptual Acuity with Imbedded Words. Only one person in each team will find this booklet in their folder -- it is the topmost booklet. Let me read ^{through} the ^{with you} directions: "Imbedded in the letters below are the names of fifty kinds of food. They can be found forward, backward, up, down, or diagonally. Your task is to find as many as you can working together as a team. Draw a line around each food as you find it."

~~Record your findings on the back of the preceding page.~~

Although the direction now call for you to record your answers on the preceding page, for ~~the~~ sake of saving time, don't bother to do that -- just circle the names of the foods on the alphabet grid itself. An example is TOMATO, which is backwards and starts 6 rows down from the top and seven rows across from the right. ^(show example) Can you see it? Today, we'd like ~~you~~ to work together as a team on the same booklet for ^{eight} minutes. Obviously, in that time you won't get nearly all fifty words for food but what matters is how many you can get, working as a team, in the time allotted. Some of the foods you may run across are foods like pie a la mode, swordfish, egg foo young, bagels, and peas. Incidentally, you may find different ^{ways} of working as a team useful -- for example, one person might do the rows, ~~the~~ other the columns, or you might both want to work all over the sheet. Ready? Go. You have ^{eight} minutes to work together.

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TASK OF PERCEPTUAL ACUITY
IMBEDDED WORDS

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
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43. _____
44. _____
45. _____
46. _____
47. _____
48. _____
49. _____
50. _____

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DIRECTIONS

Imbedded in the letters below are the names of 50 kinds of food. They can be found either forward, backward, up, down, or diagonally. Your task is to find as many as you can working together as a team. Draw a line around each food as you find it. Record your findings on the back of the preceding page. One list for both of you would be fine.

S Z A F C G O D S X C H I C K E N C H O W M E I N
T E L N B U Z V W U M L J K D F P E R I S Q R U O
E C I F H K C N Q U X Z B P M I R H S D G I J L M
A E M K O R P U T W S V Y A D R E T S E Y T A H E
K G T D O L O G M S P I H C O T A T O P N A G E L
I A M E M O H T D B N E H O T A M O T T I N A M A
N B A G A R C N U B E A W O E C D N A T U C S R E
D B N U E A A M E J I R P I G R U S O O P T K O L
S A U R R N U A T Y A D O T G L T A Y I D T A L B
N C A M C G Q A P P L E H E L U P O V W X Y Z A E
P E A S E E Y L O P O N O M N S O R L E H T O R B
R E K R C S A P E T G A B A S F C A M Y T I C T E
G H I P I E A L A M O D E A G B M C R U D E L F Y
J N K L M N O P Q R D P S G T B U E N V W A X Y E
Z O O N I O N N U W T E E V C I L A D A S I S Y K
M C E L O R G G E C O B A H S E F L E T E M T A R
H A W O E U Y K N I H T O F C I T H C S R O B O V
I B R O C U Y Y I F I P S S E S A L A M I B E T P
R H S E I N W O R B D A R H E M O H T H G I S O T
A Y O D R B K W R O A S T B E E F S L E G A B O W
B Z C D E F X W T S U V K E V O L A B C D R E F B
G H Z T J K F R I E D C H I C K E N L M E S H N A
N O L I M E P Q R S T T U U W X Y Z D T E P S H N
O C N I P L C D O W B C E C D E I S Z W A I X A
O E S W K A C I D N R O T T A N O B W A T G F A N
D Z X Y D A E R B E R I A O K U O U B X H H D J A
L K C O L E S L A W A M N Q E L J T Z L U E R H C
E S A E I O U B D J C L E W R Y J T H K L T O M N
S O Q R S E I R E H C N E R F S B E A U C T W X Y
J E L L O P Q E F H A M B U R G E R U T S I S E X

Cooperative

Anagram

Verbal: We have found that another form of cooperation is when two people are given the same task to work on *alone* for a time and then compare their ideas. Different people working independently on a creative exercise will come up with different answers. This task is designed so that teammates can work ~~a~~ separately at the same task and then improve their team score by joining together. Please work on this task separately for the first ^{*this interval*} ~~interval~~; do not share ideas. When ^{*on look onto your partner's*} ~~When~~ we have told you, exchange sheets and continue working on your partners' list for a few more minutes, creating a higher team score.

Let me read the directions with you.

Anagram Task

This test is a measure of verbal ability.

Your task will be to make as many words as possible in the time allowed using the letters of a master word which will be presented to you.

For Example:

If the master word were WASHINGTON

possible smaller words would be WING, AS, TIN, WAS, NON and so on.

The word NOON would not be acceptable since there is only one "o" in the master word.

At the end of a certain interval I will say "CHECK" and you are to put a check mark after the last word you have written. Then GO ON WORKING.

At the end of a second interval we will ask you to draw a circle around the last word written and then to exchange this booklet with your partner.

Continue working on your partner's list until time is up to create a higher team score.

Do not begin until told to do so.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible on each side of the central margin. The paper appears slightly aged or off-white.